

## **EXHIBIT 3**

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS**

ROBIN BREDA, *on behalf of herself and  
all others similarly situated,*

Plaintiff,

v.

CELLCO PARTNERSHIP d/b/a  
VERIZON WIRELESS,

Defendant.

Civil Action No. 1:16-cv-11512-DJC

**REBUTTAL EXPERT REPORT OF**

**DEBRA J. ARON, PH.D.**

May 26, 2021

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## **I. INTRODUCTION AND QUALIFICATIONS**

1. My name is Debra J. Aron. I am a Vice President at Charles River Associates (“CRA”). CRA is an international consulting and expert services firm that provides, among other services, economic expertise for litigation, regulatory proceedings, policy debates, and business strategies.
2. I received a Ph.D. in economics from the University of Chicago in 1985, where my honors included a Milton Friedman Fund fellowship, a Pew Foundation teaching fellowship, and a Center for the Study of the Economy and the State dissertation fellowship. I was an Assistant Professor of Managerial Economics and Decision Sciences from 1985 to 1992, at the J. L. Kellogg Graduate School of Management, Northwestern University, and a Visiting Assistant Professor of Managerial Economics and Decision Sciences at the Kellogg School from 1993-1995. I was named a National Fellow of the Hoover Institution, a think tank at Stanford University, for the academic year 1992-1993, where I conducted research on innovation and product proliferation in multiproduct firms. Concurrent with my position at Northwestern University, I also held the position of Faculty Research Fellow with the National Bureau of Economic Research from 1987-1990. At the Kellogg School, I taught M.B.A. and Ph.D. courses in managerial economics, information economics, and the economics and strategy of pricing. From 2000 to 2016, I taught a Master’s course on competition and strategy in communications markets approximately annually at Northwestern University. I am a member of the American Economic Association and the Econometric Society, and an Associate member of the American Bar Association.
3. A significant portion of my consulting and academic work over the past 25 years has particularly focused on the telecommunications industry. I have published my research on telecommunications-related issues in professional journals and presented it at universities and the Federal Communications Commission (FCC). I have provided economic consulting services and expert testimony on numerous occasions to firms in the communications industry, on competition, costing, pricing, incentives, and regulation issues in the United States and internationally. My clients have included many of the

largest, and some of the smaller, telecommunications companies in the U.S. My experience includes conducting economic and data analysis, and providing expert testimony, in class action matters (including class certification) in telecommunications markets and in a variety of other industries. Throughout the course of my career I have analyzed public, proprietary, and confidential telecommunications data, including customer-specific account data, both as part of my work in litigation and regulatory matters and in non-litigation consulting and research.

4. Along with and aside from my work related to the telecommunications industry, my professional training and experience as an economist have included the study and use of probability theory, statistics, econometrics, and data analysis in a variety of industries. I have published my research using these tools in leading professional economics journals, including the American Economic Review, the RAND Journal of Economics, the Journal of Law, Economics, and Organization, the Review of Network Economics, and the Journal of Competition Law and Economics, and I have given expert testimony using these tools in state and federal courts and arbitrations.
5. I have provided data analysis and consulting support in a number of matters brought under the Telephone Consumer Protection Act (“TCPA”). In addition, in the last five years, I have submitted expert reports or declarations and testified at depositions during the class certification phase of the *Verma v. Memorial Healthcare Group, Inc.*,<sup>1</sup> *Espejo v. Santander Consumer USA, Inc.* and *Bonner v. Santander Consumer USA, Inc.*,<sup>2</sup> *Hossfeld v. Compass Bank, N.A. and MSR Group, LLC*,<sup>3</sup> and *Williams v. Bluestem Brands, Inc.*<sup>4</sup> TCPA cases. I

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<sup>1</sup> *Rajesh Verma, et al., v. Memorial Healthcare Group, Inc., et al.*, in the United States District Court for the Middle District of Florida, Jacksonville Division, Case No. 3:16-CV-00427-HLA-JRK.

<sup>2</sup> *Henry Espejo, et al., v. Santander Consumer USA, Inc.*, and *Arica Bonner, et al., v. Santander Consumer USA, Inc.*, in the United States District Court for the Northern District of Illinois, Eastern Division, Case Nos. 1:11-cv-08987 and 1:12-cv-09431.

<sup>3</sup> *Robert Hossfeld, et al. v. Compass Bank, N.A., et al.*, in the United States District Court, Northern District of Alabama, Southern Division, Case No. 2:16-CV-2017-ACA.

<sup>4</sup> *Waddell Williams, et al. v. Bluestem Brands, Inc.*, in the United States District Court, Middle District of Florida, Tampa Division, Case No. 8:17-CV-1971-T-27AAS.

submitted an expert report in *Krakauer v. DISH Network, LLC*, and testified at trial in that case.<sup>5</sup>

6. My professional qualifications, including other TCPA cases not listed above in which I have given testimony are detailed in my curriculum vitae, which is attached as Exhibit 1 to this report.

## II. ASSIGNMENT

7. I was asked by counsel for Defendant Cellco Partnership d/b/a Verizon Wireless to examine the Expert Report of Kevin G. Jewell, dated May 3, 2021,<sup>6</sup> submitted on behalf of Plaintiff Robin Breda, and provide my assessment of the analysis and conclusions contained therein. Specifically, I was asked to provide an opinion as to whether Mr. Jewell has articulated a reliable methodology to (A) determine on a class wide basis without need for individual inquiry that would be administratively infeasible whether, for each purported class member, Verizon made calls to a telephone number assigned to a cellular telephone service that was (i) a “wrong number,” i.e., a non-Verizon mobile telephone number (“MTN”) that was not the customer’s own telephone number that the customer provided to Verizon as a “can-be-reached” number (“CBR Number”) or (ii) the CBR Number provided by the customer, where the number belonged to a non-customer for which the non-customer had revoked consent to call; and (B), if so, ascertain the identity of the owners of the subject numbers and whether those numbers were assigned to a cellular telephone service at the time of the subject calls.
8. CRA bills for my time on this engagement at \$815 per hour, for the time of the CRA staff that have assisted me in preparing my report at their usual and customary rates, and for any expenses incurred in the preparation of this report.
9. A list of the documents and materials that I considered in my analysis is contained in Exhibit 2. My staff and/or I also interviewed Ms. Cheryl Boulanger, Senior Manager, B2C

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<sup>5</sup> *Thomas H. Krakauer et al., v. DISH Network, L.L.C.*, in the United States District Court for the Middle District of North Carolina, Durham Division, No. 1:14-cv-33.

<sup>6</sup> Expert Report of Kevin G. Jewell, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, May 3, 2021 (hereafter, 5/3/2021 Jewell Report).

Governance & Compliance, Verizon,<sup>7</sup> Ms. Meryl Friedman, Supervisor, Litigation Support, Verizon,<sup>8</sup> Mr. Arthur Zawodny, Senior Member—Technical Staff, Verizon,<sup>9</sup> Mr. Lorne George, Sr., Senior Manager—Systems Engineering, Verizon,<sup>10</sup> Mr. Jonathan LaChiana, Senior Analyst—Sys Anyl & Prg, Verizon,<sup>11</sup> Mr. Nathan Shapley, Manager—Collections Strategy Reporting, Verizon,<sup>12</sup> Mr. Ron Martinez, Senior Manager—Finance Operations, Verizon,<sup>13</sup> Mr. Amit Tyagi, Senior Manager—Information Technology, Verizon,<sup>14</sup> Ms. Heather Grafton, Senior Manager—Network Engineering & Operations, Verizon,<sup>15</sup> Mr. James Ganey, Jr., Senior Manager—B2C Call Center Technologies, Verizon,<sup>16</sup> Ms. Shelly Graw, Senior Manager—CB2C Legal/Regulatory Liaison & Customer Escalations, Verizon,<sup>17</sup> Ms. Erica Wooley, Consultant for Billing Solutions,

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<sup>7</sup> Fourth Declaration of Cheryl Boulanger, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, March 27, 2020 (hereafter, *3/27/2020 Boulanger Declaration*), ¶ 2. Interviews with Ms. Boulanger took place on March 12, 2020, December 16, 2020, May 17, 2021, May 18, 2021, May 19, 2021, May 21, 2021, and May 23, 2021.

<sup>8</sup> 30(b)(6) Deposition of Meryl Friedman, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, October 23, 2020 (hereafter, *10/23/2020 Friedman Deposition*), pp. 11-13. *See also*, Declaration of Meryl Friedman, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, May 8, 2017 (hereafter, *5/8/2017 Friedman Declaration*), ¶ 3. Interviews with Ms. Friedman took place on April 27, 2020, May 15, 2020, August 19, 2020, and October 2, 2020.

<sup>9</sup> *See*, “Art Zawodny,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/art-zawodny-5053505/>. Interviews with Mr. Zawodny took place on July 15, 2020, September 30, 2020, October 21, 2020, October 29, 2020, October 30, 2020, November 10, 2020, January 11, 2021, February 1, 2021, February 19, 2021, February 25, 2021, May 2, 2021, May 17, 2021, May 19, 2021, May 21, 2021, and May 24, 2021.

<sup>10</sup> Declaration of Lorne George, Sr., *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, May 21, 2021, (hereafter, *5/21/2021 George Sr. Declaration*), ¶ 2. Interviews with Mr. George, Sr., took place on November 30, 2020, December 16, 2020, January 27, 2021, February 19, 2021, and April 9, 2021.

<sup>11</sup> Interviews with Mr. LaChiana took place on February 11, 2021 and February 19, 2021.

<sup>12</sup> *See*, “Nate Shapley,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/nateshapley/>. Interviews with Mr. Shapley took place on January 27, 2021 and February 19, 2021.

<sup>13</sup> *See*, “Ron Martinez,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/ronrmartinez/>. Interviews with Mr. Martinez took place on January 27, 2021 and February 19, 2021.

<sup>14</sup> *See*, “Amit Tyagi,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/amitt1/>. Interviews with Mr. Tyagi took place on February 25, 2021 and March 16, 2021.

<sup>15</sup> *See*, “Heather Grafton,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/heather-grafton-14198a64/>. Interviews with Ms. Grafton took place on February 25, 2021 and March 16, 2021.

<sup>16</sup> *See*, “James Ganey,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/james-ganey-1411992/>. Interview with Mr. Ganey, Jr., took place on February 1, 2021.

<sup>17</sup> *See*, “Shelly Graw,” LinkedIn Corporation, accessed May 19, 2021 at <https://www.linkedin.com/in/shelly-graw-538287146/>. Interviews with Ms. Graw took place on May 17, 2021, May 18, 2021, May 19, 2021, and May 21, 2021.

Verizon,<sup>18</sup> Mr. Karl King, Director, System Engineering, Verizon,<sup>19</sup> Mr. Laurence Siegel, Executive Vice President of Product Development, LiveVox, Inc. (“LiveVox”),<sup>20</sup> and Mr. Aaron Easley, Manager—Business Consulting, LiveVox,<sup>21</sup> Mr. Ngon Goon, Principal Member Applications Staff, Verizon,<sup>22</sup> Mr. Nicholas Defalco, Distinguished Member of the Technical Staff – VISION DBA / Vision DB2 Performance, Verizon,<sup>23</sup> Mr. Scott Stirrup, Principal Member Applications Staff, Verizon,<sup>24</sup> and Mr. Ravi Venkatakrishnan, Senior Manager – Configuration and Environment Management, Verizon.<sup>25</sup>

10. My report is organized as follows. In Section III, I summarize my opinions in this case. Section IV sets out my understanding of the relevant facts of the case, the proposed class definitions, the automated call flow options provided to called parties who receive a consumer collections campaign call from Verizon, and the stipulated agreements delimiting the data produced in this case. In Section V, I summarize the analyses described in Mr. Jewell’s expert report and I describe the Verizon data upon which he relied.
11. In Section VI, I explain how my analysis of the data and documents in this case and Mr. Jewell’s analysis itself demonstrate that Mr. Jewell’s methodology for identifying what purport to be “wrong number” calls does not reliably identify wrong number calls because

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<sup>18</sup> See, Memorandum of Opinion, *Bailey v. Diversified Consultants Inc.*, United States District Court for the Northern District of Alabama, Case No.: 7:19-cv-00013-LSC, March 4, 2020, at <https://www.casemine.com/judgement/us/5e71acce4653d03cb8d2b448>. Interviews with Ms. Wooley took place on May 17, 2021, May 18, 2021, May 19, 2021, and May 21, 2021.

<sup>19</sup> See, Second Declaration of Karl King, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, May 26, 2021 (hereafter, *5/26/2021 King Declaration*), ¶ 2. Interview with Mr. King took place on May 17, 2021, May 21, 2021, and May 24, 2021.

<sup>20</sup> Deposition of Laurence Siegel, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, December 10, 2020 (hereafter, *12/10/2020 Siegel Deposition*), p. 13. See also, Declaration of Laurence Siegel, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, September 13, 2017 (hereafter, *9/13/2017 Siegel Declaration*), ¶ 2. Interviews with Mr. Siegel took place on April 27, 2020 and October 2, 2020.

<sup>21</sup> See, “Aaron Easley,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/aaron-easley-a3916498/>. Interviews with Mr. Easley took place on April 27, 2020 and October 2, 2020.

<sup>22</sup> See, “Ngoon Goon,” LinkedIn Corporation, accessed May 21, 2021 at <https://www.linkedin.com/in/ngoon-goon-5b0a3b34>. Interview with Mr. Goon took place on May 21, 2021 and May 24, 2021.

<sup>23</sup> Interview with Mr. Defalco took place on May 21, 2021 and May 24, 2021.

<sup>24</sup> See, “Scott Stirrup,” ZoomInfo Technologies LLC, accessed May 21, 2021 at <https://www.zoominfo.com/p/Scott-Stirrup/1941920807>. Interview with Mr. Stirrup took place on May 21, 2021 and May 24, 2021.

<sup>25</sup> See, “Ravi Venkatakrishnan,” LinkedIn Corporation, accessed May 21, 2021 at <https://www.linkedin.com/in/ravi-venkatakrishnan-6543391a>. Interview with Mr. Venkatakrishnan took place on May 21, 2021 and May 24, 2021.

of defects of logic and misunderstanding of the data. That section also includes examples of automated notations in the dialer that were ignored or misunderstood by Mr. Jewell but that indicate that the number dialed was a right number.

12. Section VII describes the defects in Mr. Jewell's analysis that purports to identify telephone numbers on which a call recipient reached an agent to instruct that the number was a wrong number or to stop calling. That section also includes examples of call flows in the data treated by Mr. Jewell as indicators that the call reached an agent but that indicate that an agent was never reached; it also includes examples of calls in which fuller examination of the record related to the account demonstrate that Mr. Jewell's methodology is unreliable because it captures accounts that not only had indications of being right numbers but on which no instruction to stop calling was provided and/or completed so that it could be effectuated.
13. In Section VIII, I explain that the steps Mr. Jewell takes to filter out of other groups phone numbers that received no calls after the purported "wrong number" or, perhaps, "revocation of consent" call do not remedy the logical or factual defects that cause his identification of wrong number or revocation of consent calls to be reliable in the first instance.
14. Section IX addresses the disconnection between Mr. Jewell's Group 5 and the allegations in this case. It also provides examples of phone numbers in Mr. Jewell's Group 5 that are indicated to be, according to Mr. Jewell's own methods, right numbers on more than one account, and explains why individual inquiry would be necessary to determine if accounts that, according to Mr. Jewell have different account owners are or are not connected to each other via family, work, or for other reasons.
15. Section X describes the inconsistencies between the results reported by Mr. Jewell regarding which telephone numbers are purportedly wireless and the results I obtained using the same data sets purportedly consulted by Mr. Jewell, as well as other data sets that corroborate my findings. This section also discusses the implications for whether Ms. Breda herself would be included in any wireless class if her number had been analyzed using third party data to the exclusion of the individual inquiry that was necessary in this case to determine that her number is wireless for TCPA purposes.

16. In Section XI, I explain that, contrary to Mr. Jewell's assertions, his methodology purports only to identify lists of phone numbers, but not "individuals" who would comprise the proposed class. Mr. Jewell's methodology does not provide any means of identifying the persons who received the alleged "wrong number" calls or calls to numbers for which Verizon allegedly did not have consent to call. In this section, I also explain (1) why matching third-party "reverse-lookup" data with data from Defendant are highly incomplete and unreliable, and cannot reliably distinguish between true wrong numbers and numbers that were falsely denoted as wrong numbers; and (2) why data from telecommunications carriers are also incomplete and unsuited to identifying either the user of a telephone number or wrong number calls in the absence of individualized inquiry.

### **III. SUMMARY OF OPINIONS**

17. Plaintiff's expert, Mr. Jewell, has proposed a methodology as to how to distinguish wireless phone numbers from non-wireless phone numbers, and assemble the purportedly wireless phone numbers into groups that, presumably, will be associated by Plaintiff with the allegations in this case by identifying purported "wrong numbers" or purported "revocations of consent." His methodology is invalid.
18. First, Mr. Jewell's methodology for determining which telephone numbers are wireless is based on third-party vendor data that Mr. Jewell declined to provide in discovery; when I retained the same vendor to process the same data, I obtained different results--notably, for the named plaintiff herself. In fact, Ms. Breda's telephone phone number has been queried against at least two data bases and at different times during this case and has, every time, been identified by the data as wireline, except by Mr. Jewell. Ms. Breda's service at the time of the calls in suit was a hybrid technology and was the subject of a legal ruling in this case in which it was found, after individual inquiry, to be considered wireless for TCPA purposes. Mr. Jewell's claim that his unproduced data show Ms. Breda's telephone number to be wireless is inconsistent with all other analyses in the case. The results I have obtained from the data queries, combined with the individual inquiry conducted into Ms. Breda's telephone number in this case, indicate that determining whether a telephone number was

wireless at the time of the calls in suit using third-party data is not reliable and, as with Ms. Breda's phone number, cannot be definitively determined on a class-wide basis without individual inquiry. Had Ms. Breda's telephone number been queried along with the thousands of others against even the database purportedly queried by Mr. Jewell, it would have been identified as wireline and she would not be included in any classes in this case.

19. Second, Mr. Jewell's methodology of putting telephone numbers into groups according to various criteria assigned by Plaintiff's counsel does not determine whether a telephone number is a "wrong number" and/or whether consent to call that number was revoked. While the call records data produced in this case contain disposition fields and account remarks that purportedly indicate when a person answered a debt collection call from Verizon and indicated via key presses in response to prompts from the automated system that the number was a wrong number, data analysis demonstrates that (consistent with common sense) self-reported "wrong number" responses associated with collections calls are not reliable for identifying genuine wrong numbers.
20. When people answer calls from Verizon on calls seeking to collect on overdue accounts, they hear a menu of button press options, one of which is a sequence that allows the customer to indicate the call is a "wrong number." Mr. Jewell's own analysis demonstrates that calls on which people who indicate via key presses that the call is a "wrong number" are not necessarily in fact wrong number calls. He demonstrates this by showing that many—indeed, he finds that nearly *a third*—of the phone numbers that are supposedly wrong numbers according to the recipients' key press responses to menu options are revealed on other calls to be right numbers because the recipient, for example, pays the bill or validates the account on the same phone number.
21. It is a logical fallacy to assume that the two-thirds of the phone numbers on which a recipient pressed the "wrong number" keys but on which another call verifying that the call was a "right number" was *not* found are wrong numbers. Absence of evidence that a proposition is false is not evidence that it is true. And, in this case, Mr. Jewell provides an abundance of evidence that the key press sequence indicating "wrong number" is unreliable as an indicator of a true wrong number. The correct inference from the evidence is that

*none* of the telephone numbers on which someone pressed the “wrong number” buttons in response to a recorded prompt can be assumed to be or determined to be true wrong numbers without further, individual inquiry.

22. Aside from the logical fallacy of his approach, Mr. Jewell’s understanding of the data is incorrect, as a result of which he ignores affirmative evidence of supposedly wrong numbers being right numbers. For one thing, Mr. Jewell has ignored several fields in the data that identify calls on which the call recipient on a purportedly “wrong number” indicated via a key press that they *are* the customer being sought and in some cases even went on to pay the bill or validate the account *on the same call*. Hence, Mr. Jewell undercounts the supposedly wrong numbers for which there is affirmative evidence that they were right numbers. For another thing, although Mr. Jewell searches the data set that provides the free form notes and remarks taken by the calling agents to find key words that imply a *wrong number*, he did not review that same data set for indications of the numbers being *right numbers*.
23. Mr. Jewell’s methodology fails in other respects as well. According to Mr. Jewell, on approximately 10 percent of the calls on which a call recipient indicates “wrong number” via key presses the call recipient stays on the line to talk to an agent and tells the agent it is a wrong number and/or to stop calling. However, his methodology for finding calls that reached an agent and gave such an instruction is incorrect. Mr. Jewell misunderstands the data and counts calls that never reached an agent as calls that reached an agent. In addition, his formulaic key-word approach to finding agent comments—among hundreds or thousands of notes from agents on a single account, on thousands of calls and accounts—that supposedly indicate that the customer told the agent the number was wrong or to stop calling ignores the context and other comments in the records. Detailed review of a sample of account remark records demonstrates that taking key words out of context can lead, not surprisingly, to the wrong conclusions.
24. Indeed, even Mr. Jewell’s own analysis shows that 30 percent of purported wrong numbers that Mr. Jewell claims reached an agent and on which the call recipient purportedly instructed the agent that the number was incorrect and/or to stop calling were identified on

other calls as right numbers. Examples in the data demonstrate the variety of circumstances that can be discussed with an agent on a collections call, including domestic disputes involving their account and lost or stolen phones, that can lead to the inclusion of “key words” selected by Mr. Jewell and captured by his mechanical analysis but that do not indicate an instruction that the number is incorrect or to stop calling. Reviewing account remarks is necessary to determine what actually transpired on a call and requires individual detailed review.

25. Aside from these failures to properly understand and respect the full data made available in the case, Mr. Jewell’s treatment of the agent remarks data commits the same logical fallacy as does his treatment of the dialer data. A call recipient telling an agent on a debt collection call that they are not the customer, or that they don’t know the customer, and that the number is incorrect, does not mean that those representations were truthful or that the number was a wrong number.
26. Mr. Jewell also collects a set of telephone numbers on which a call recipient indicated via key presses that the number was a “wrong number” and that appears as having also been dialed to collect a debt on a different account purportedly associated with a different person. Mr. Jewell does not offer an explanation as to why the same telephone number appearing in two accounts owned by two different people as a number at which a subscriber can be reached would incite suspicion of a wrong number. Analysis of the data shows that a telephone number can be in multiple accounts and have “right number” indications on calls associated with each account. In addition, examples show that Mr. Jewell’s process to determine if two accounts were associated with different people involved only comparing the subscriber names and email addresses on the account, a process that does not demonstrate that the accounts are not related to each other. For example, two accounts may belong to two different people with different first and last names who are members of the same household with the same physical address, or two different people with different first and last names who are members of the same family at different addresses. Indeed, each subscriber may be an account manager on the other’s account and Mr. Jewell’s methodology would not identify the accounts as related. Determining whether two

accounts relate to different people who are unconnected to each other—if that is relevant to any claims in this case in the first instance—would require individual inquiry.

27. Mr. Jewell claims that his assignment was to identify the “individuals” that may be relevant to Plaintiff’s motion for class certification. His report pertains only to categorizing phone numbers, however. Nowhere in his report does Mr. Jewell even purport to be able to identify the individuals associated at the time of each call with each telephone number in his groups of telephone numbers or articulate any methodology for doing so. To the extent Plaintiff intends to rely on third-party data or wireless carrier records to identify “individuals,” Mr. Jewell did not disclose in his report a methodology that can be implemented to reliably resolve the significant incompleteness, inconsistencies, ambiguities, and errors in such source data without individual inquiry.

#### **IV. THE PARTIES, PROPOSED CLASSES, COLLECTIONS CALL FLOW, AND PARAMETERS OF THE DATA PRODUCTION IN THIS CASE**

##### **A. The Parties**

###### **i. Ms. Breda and Her Telephone Number (XXX) XXX-7857**

28. At the time of her *7/21/2016 Individual Complaint*, Ms. Breda was “an adult individual residing in Rowley, Massachusetts[.]”<sup>26</sup> I understand that Ms. Breda first opened an account with Verizon for cellular service in 2003 and was assigned the telephone number (XXX) XXX-7857.<sup>27</sup> On January 14, 2014, I understand that Ms. Breda transferred her (XXX) XXX-7857 telephone number from her Verizon account to David Breda’s Verizon

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<sup>26</sup> Complaint, *Breda v. Celco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, July 21, 2016 (hereafter, *7/21/2016 Individual Complaint*), ¶ 3. I understand that on July 26, 2016, *7/21/2016 Individual Complaint* was replaced with Class Action Complaint, *Breda v. Celco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, July 21, 2016 (hereafter, *7/21/2016 Class Action Complaint*). See also, Joint Report Pursuant To Fed. R. Civ. P. 26(f) and Loc. R. 16.1, as Modified (Including Loc. R. 16.1(d)(3) Certifications), *Breda v. Celco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, December 5, 2016 (hereafter, *12/5/2016 Joint Report*), p. 8.

<sup>27</sup> Third Declaration of Cheryl Boulanger, *Breda v. Celco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, June 9, 2017 (hereafter, *6/9/2017 Boulanger Declaration*), ¶ 5.

account.<sup>28</sup> I understand that Ms. Breda's telephone number was ported from David Breda's Verizon account to another telephone service provider on January 27, 2015.<sup>29</sup>

29. I understand that Ms. Breda received 14 calls on her phone number, (XXX) XXX-7857, from May 5, 2016 until July 11, 2016<sup>30</sup> that are of relevance to this case. I understand that these calls were placed by Verizon to the (XXX) XXX-7857 telephone number due to an inaccurate CBR Number provided to Verizon on or around November 27, 2015 in connection with an account of Ms. Megan Kelton, a customer that Verizon was trying to reach to collect unpaid bills from May 5, 2016 until July 11, 2016 using the (XXX) XXX-7857 telephone number.<sup>31</sup>
30. Of the 14 calls to the (XXX) XXX-7857 telephone number in that period, 13 were placed through the LiveVox Dialer.<sup>32</sup> With respect to the one call placed to the (XXX) XXX-7857 number through Verizon's Internal Dialer, I understand that:

The Parties agree that (i) the call was placed during a Verizon Wireless collection campaign on a Verizon Wireless consumer account, (ii) Ms. Breda received the call, (ii) Verizon Wireless's record of the call bears the notation “reached\_wrong\_party\_transfer\_reached\_agent,” and (iii) during this call, Ms.

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<sup>28</sup> 6/9/2017 *Boulanger Declaration*, ¶ 6.

<sup>29</sup> 6/9/2017 *Boulanger Declaration*, ¶ 6. See also, 12/5/2016 *Joint Report*, p. 11. According to a Neustar Portal Numbering record for the (XXX) XXX-7857 telephone number accessed on May 4, 2017, the transfer to another service provider had a start date of January 24, 2015. See, “TN History for [XXX-XXX]-7857,” Neustar, Inc., accessed May 4, 2017 at <https://numbering.neustar.biz/secure>.

<sup>30</sup> VZ0001-VZ0009 and 10/23/2020 *Friedman Deposition*, pp. 31-33 and Ex. 1. Declaration of Cheryl Boulanger, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, April 4, 2017 (hereafter, 4/4/2017 *Boulanger Declaration*), ¶ 8, 10/23/2020 *Friedman Deposition*, p. 177, VZW0106, and 12/5/2016 *Joint Report*, pp. 10-12. As explained further below, while Mr. Jewell claims that Ms. Breda's telephone number “appeared on two or more Verizon Wireless accounts,” I have seen no evidence suggesting that Ms. Breda's telephone number appeared on two or more Verizon Wireless accounts at the same time. 5/3/2021 *Jewell Report*, ¶ 25 and Section IX.

<sup>31</sup> 4/4/2017 *Boulanger Declaration*, ¶ 8, 10/23/2020 *Friedman Deposition*, p. 177, VZW0106, and 12/5/2016 *Joint Report*, pp. 10-12. As explained further below, while Mr. Jewell claims that Ms. Breda's telephone number “appeared on two or more Verizon Wireless accounts,” I have seen no evidence suggesting that Ms. Breda's telephone number appeared on two or more Verizon Wireless accounts at the same time. 5/3/2021 *Jewell Report*, ¶ 25 and Section IX.

<sup>32</sup> VZ0001-VZ0009 and 10/23/2020 *Friedman Deposition*, pp. 31-35 and Ex. 1. Records of these 13 calls can be found in “VZW0121 UPDATED2,” which is the LiveVox dialer records production. Letter, Alison T. Holdway to Timothy Sostrin, re: Breda v. Cellco Partnership, C.A. 1:16-cv-11512, United States District Court for the District of Massachusetts, April 8, 2021 (hereafter, 4/8/2021 *Production Letter*), and Joint Motion for Entry of Parties' Stipulation as to Continued Discovery and Class Certification Briefing as an Order of This Court, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, so ordered March 26, 2021 (hereafter, 3/26/2021 *Stipulation*), ¶ 1.

Breda was transferred to a representative and informed the representative that Verizon Wireless was calling the wrong number.<sup>33</sup>

31. I understand that Ms. Breda brings this case as a purported class action alleging that the defendant placed automated calls to her cellular telephone in violation of the Telephone Consumer Protection Act.<sup>34</sup>

**ii. Cellco Partnership d/b/a Verizon Wireless**

32. Cellco Partnership d/b/a Verizon Wireless (“Defendant” or “Verizon”) provides wireless, residential, and business telecommunications products and services and operates as a subsidiary of Verizon Communications Inc.<sup>35</sup> Through its retail stores and online, Verizon offers phones, tablets, and hotspots, mobile plans, and accessories, among other products and services.<sup>36</sup>
33. Verizon Communications Inc. is a publicly-traded holding company that through its subsidiaries provides “communications, technology, information and entertainment products and services to consumers, businesses and government entities.”<sup>37</sup>

**B. The Call Process, Call Flow, and Stipulated Limitations on the Allegations that Informed the Data Production**

34. I understand that at the time that a post-paid Verizon account is established for a customer and wireless service is activated, each Verizon customer is assigned at least one MTN and asked to provide a CBR Number for use by Verizon in situations when the customer’s assigned MTN cannot be used by Verizon to contact that customer.<sup>38</sup> Verizon service representatives cannot open a new account unless there is a CBR Number.<sup>39</sup>

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<sup>33</sup> 3/26/2021 *Stipulation*, ¶ 3. The record of the call can be found in “VZW0123 UPDATED2 – VZW0155 UPDATED2,” which is part of the Internal Dialer records production. 4/8/2021 *Production Letter*.

<sup>34</sup> 7/21/2016 *Class Action Complaint*, ¶ 1.

<sup>35</sup> “Cellco Partnership, Inc. > Private Company Profile,” S&P Capital IQ, May 15, 2021.

<sup>36</sup> “Cellco Partnership, Inc. > Private Company Profile,” S&P Capital IQ, May 15, 2021.

<sup>37</sup> Verizon Communications Inc., Form 10-K, for the year ended December 31, 2020, p. 4.

<sup>38</sup> 3/27/2020 *Boulanger Declaration*, ¶4; and Fifth Declaration of Cheryl Boulanger, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, May 26, 2021 (hereafter, 5/26/2021 *Boulanger Declaration*), ¶ 7.

<sup>39</sup> 5/26/2021 *Boulanger Declaration*, ¶ 7.

35. If a customer's wireless service is at risk of suspension or termination for non-payment, I understand that Verizon uses a third-party dialing platform hosted by LiveVox ("LiveVox Dialer") and/or its own in-house dialing platform ("Internal Dialer") to attempt to reach the customer on either his or her account's assigned MTN(s) or on a CBR Number provided by the customer to Verizon.<sup>40</sup>
36. I understand that when a Verizon customer whose account is at risk of suspension or termination for non-payment is called, a pre-recorded message speaks the name of the customer who is financially responsible for the account and asks if the recipient of the call is that person.<sup>41</sup> Specifically, the Interactive Voice Response ("IVR") recording instructs the person who answered the phone to press "1" if he or she is the person identified in the message, or press "2" if he or she is not the person identified in the message.<sup>42</sup>
37. I understand that if the person presses "1" he or she is routed to a menu of options for paying the bill or making a promise to pay, and if the person presses "2" he or she is provided three options.<sup>43</sup>
38. After a key press of "2," the call recipient can press "1" in response to "If you need some time to bring [Customer] to the phone"; can press "2" in response to "If [Customer] is not available", or can press "3" in response to "wrong number."<sup>44</sup>
39. I understand that both the Internal Dialer and the LiveVox Dialer maintain certain records of calls made for debt collection campaigns. Depending on the sequence of key presses made by the call recipient, as well as other events that may have transpired on a call (such as whether the call went to a voice mail machine, was not answered at all, was transferred to an agent, and other outcomes) certain fields in the dialer records are populated with phrases, words, or other text that reflect certain events that occurred on the call. These fields related to the outcome or status of the call are referred to as "disposition" fields and

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<sup>40</sup> 3/27/2020 Boulanger Declaration, ¶5, 5/26/2021 Boulanger Declaration, ¶ 9, and Interviews with Cheryl Boulanger.

<sup>41</sup> 3/27/2020 Boulanger Declaration, ¶6. See also, 10/23/2020 Friedman Deposition, Ex. 14.

<sup>42</sup> 3/27/2020 Boulanger Declaration, ¶6. See also, 10/23/2020 Friedman Deposition, pp. 40-41 and Ex. 14; and 12/10/2020 Siegel Deposition, pp. 91-92.

<sup>43</sup> 10/23/2020 Friedman Deposition, Ex. 14.

<sup>44</sup> 10/23/2020 Friedman Deposition, Ex. 14.

the key words or phrases populated into those fields are referred to as “dispositions” or “disposition codes.” The disposition fields in the dialer data may be populated automatically by the dialer (if, for example, the call fails or a machine answers), or may be populated by an agent from a menu on the agent’s screen (if the call transfers to an agent or if there is an attempt to transfer the call to an agent).<sup>45</sup>

40. I understand that all dialer data fields available to Verizon and/or LiveVox have been made available to Plaintiff for all calls, subject to certain limitations, for which records were retained from January 1, 2014 to September 1, 2017 in LiveVox Dialer records (VZW0121 UPDATED2) and from October 1, 2018 to December 31, 2020 in Internal Dialer records (VZW0123 UPDATED2 -VZW0155 UPDATED2).<sup>46</sup> Specifically, I understand that Plaintiff and Defendant agreed to limit the case to all call records associated with “consumer accounts and telephone numbers [other than Verizon Wireless MTNs] that were called during a Verizon Wireless collection campaign” and had one or more calls dispositioned with one or more of the following notations: “Agent-Wrong Number,” “Call Recipient Says Wrong Number,” “Agent – Cust WPC 1,” and/or all notations beginning with “reached\_wrong\_party.”<sup>47</sup>
41. I understand that, in light of the stipulation just described, Verizon attempted to remove from its Internal Dialer and LiveVox Dialer data productions all calls that were made to or from numbers that were Verizon mobile telephone numbers at the time of the call.<sup>48</sup> In addition, I understand that Verizon also attempted to remove all calls related to dialer campaigns other than Verizon Wireless consumer collections campaigns.<sup>49</sup>

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<sup>45</sup> See, for example, 10/23/2020 Friedman Deposition, pp. 191-193.

<sup>46</sup> 3/26/2021 Stipulation, ¶ 1. See also, 3/27/2020 Boulanger Declaration, ¶¶ 7-11.

<sup>47</sup> 3/26/2021 Stipulation, ¶ 1.

<sup>48</sup> See also, for example, Letter, Emily H. Bryan to Timothy Sostrin, re: Breda v. Cellco Partnership, C.A. 1:16-cv-11512, United States District Court for the District of Massachusetts, January 14, 2021 and Email, Alison T. Holdway to Timothy Sostrin, RE: breda v. verizon, March 31, 2021.

<sup>49</sup> See, for example, Email, Alison T. Holdway to Timothy Sostrin, RE: Verizon/Breda, April 9, 2021. I understand that certain calls related to fraud campaigns (i.e., advising customers that someone may have stolen access to their account or there may be other fraudulent activity) and late-stage retention campaigns were not removed, and that these are not consumer collections campaigns, but can be readily identified in the data. See 5/21/2021 George Sr. Declaration, ¶ 6.J

42. I understand that among call records made available by Verizon, Plaintiff and Defendant further agreed to the following interpretation of flows of calls dispositioned with a notation “Call Recipient Says Wrong Number” in the LiveVox Dialer records and calls dispositioned with notations beginning with “reached\_wrong\_party” in the Internal Dialer records:

i. “Call Recipient Says Wrong Number” (LiveVox Dialer records)

The notation “Call Recipient Says Wrong Number” is an automated system notion [sic] that appears in the LiveVox call records and occurs, without any input from a Verizon Wireless or contracted representative, during (i) an outbound collection call when a called party presses “2” and then presses “3” in response to a prerecorded IVR [(interactive voice response system)] message that plays at the beginning of the call, or (ii) an inbound call placed by a calling party in response to an outbound collection call, when the calling party presses “\*” in response to a prerecorded IVR message that plays at the beginning of the inbound call. The notation occurs before a called party or calling party speaks to a representative during an outbound or inbound call. The existence of the notion [sic] does not mean that the called or calling party did or did not speak with a representative after (i) pressing “2” and “3” or (ii) pressing “\*” respectively.<sup>50</sup>

ii. “Reached\_Wrong\_Party” Prefix (Internal Dialer records)

Notations beginning with “reached\_wrong\_party” are automated system notations that appear in the Verizon internal call records and occur, without any input from a Verizon Wireless or contracted representative, during an outbound collection call placed by Verizon’s internal call [sic], when a called party presses “2” and then presses “3” in response to a prerecorded IVR message that plays at the beginning of the call.<sup>51</sup>

43. I understand that “Agent-Wrong Number” and “Agent – Cust WPC 1” present in the LiveVox Dialer records are system notations that occur as a result of selection “by a Verizon Wireless or contracted representative after the representative speaks with (i) a call recipient during an outbound collection call that began by conveying a prerecorded IVR

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<sup>50</sup> 3/26/2021 Stipulation, ¶ 2.c. See also, 12/10/2020 Siegel Deposition, pp. 91-92.

<sup>51</sup> 3/26/2021 Stipulation, ¶ 2.d. See also, 1/15/2021 Boulanger Deposition, pp. 33-34.

message, or (ii) a calling party during an inbound call placed by the calling party in response to an outbound collection call.”<sup>52</sup>

44. I understand that Verizon’s practice is to permit a call recipient called on a telephone number that is not a Verizon MTN, i.e., a CBR number, to revoke consent to call on that telephone number only by speaking to an agent to make the request and by telling the agent the telephone number that the call recipient is asking to be removed.<sup>53</sup>

### C. The Proposed Classes

45. In Plaintiff’s *7/21/2016 Class Action Complaint*, Plaintiff brought her case on behalf of the following purported classes:

TCPA Class: (1) All persons in the United States (2) to whose cellular telephone number (3) Verizon placed a non-emergency telephone call (4) using an autodialer or a prerecorded voice (5) within four years of the complaint (6) where Verizon did not have express consent to call said cellular telephone number.

Button Opt Out Class: (1) All persons in the United States (2) to whose cellular telephone number (3) Verizon placed a non-emergency telephone call (4) using an autodialer or a prerecorded voice (5) within four years of the complaint (6) after said person indicated through an automated prompt that Verizon was calling in error.

Oral Revoke Class: (1) All persons in the United States (2) to whose cellular telephone number (3) Verizon placed a non-emergency telephone call (4) using an autodialer or a prerecorded voice (5) within four years of the complaint (6) after said person had advised Verizon to cease calling.<sup>54</sup>

46. In the court filing in this case from December 5, 2016, Plaintiff described the three classes of persons she was seeking to certify as follows:

- 1) “Persons called on their cellular telephone number without express consent”;
- 2) “Persons called on their cellular telephone number after they indicated through an automated prompt that Verizon was calling in error”; and

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<sup>52</sup> 3/26/2021 *Stipulation*, ¶¶ 2.a-b.

<sup>53</sup> 5/26/2021 *Boulanger Declaration*, ¶ 11.

<sup>54</sup> 7/21/2016 *Class Action Complaint*, ¶ 22.

3) “Persons called on their cellular telephone number after they orally told Verizon to stop calling.”<sup>55</sup>

## V. SUMMARY OF THE EXPERT REPORT OF MR. JEWELL

### A. Mr. Jewell’s Assignment and Findings

47. In his expert report dated May 3, 2021, Mr. Jewell’s assignment from Plaintiff was to “analyze call records and account remark records produced by Verizon,” to “identify certain sets of individuals meeting various criteria,” and to count “the number of times each group member received a relevant prerecorded call from Verizon.”<sup>56</sup> Mr. Jewell reports that he was also asked to “review the records pertaining to the plaintiff.”<sup>57</sup>
48. Specifically, Mr. Jewell was provided by Plaintiff’s counsel a set of criteria for 9 groups of records (which he describes as “sets of individuals”) that he was advised “may be relevant to Plaintiff’s motion for class certification” and was directed to identify records in the data that satisfy the assigned criteria.<sup>58</sup> Mr. Jewell describes these nine groups and his findings as follows:
  1. Group 1: 112,655 unique wireless phone numbers or “[p]ersons who received a prerecorded collection call from Verizon on a cellular telephone for which they informed Verizon that it had been calling the wrong number via key-press responses to prerecorded prompts in the call.”<sup>59</sup>
  2. Group 1A: 76,348 unique wireless phone numbers or persons in Group 1 excluding “any person from Group 1 if any call record to or from the cellular telephone number at issue on any Verizon account has any `th_result` or `final_status` disposition other than those listed in Exhibit 1[,]” which, according to Mr. Jewell, “limits this subgroup to

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<sup>55</sup> 12/5/2016 *Joint Report*, p. 2.

<sup>56</sup> 5/3/2021 *Jewell Report*, ¶¶ 3-4. Mr. Jewell did not discuss in his report whether and, if so, how his nine groups relate to the three purported classes proposed by Plaintiff in 7/21/2016 *Class Action Complaint*, ¶ 22.

<sup>57</sup> 5/3/2021 *Jewell Report*, ¶ 25.

<sup>58</sup> 5/3/2021 *Jewell Report*, ¶ 3.

<sup>59</sup> 5/3/2021 *Jewell Report*, ¶¶ 3 and 15.

phone numbers that bear no disposition code in the Call Records (at any time and on any account) that [he understands] could be potentially inconsistent with a wrong number call.”<sup>60</sup>

3. Group 2: 71,361 unique wireless phone numbers or “[p]ersons in group 1 who thereafter received at least one additional prerecorded collection call from Verizon on the same telephone number and concerning the same Verizon account.”<sup>61</sup>
4. Group 2A: 44,278 unique wireless phone numbers or “[p]ersons in group 1A who thereafter received at least one additional prerecorded collection call from Verizon on the same telephone number and concerning the same Verizon account” which again, according to Mr. Jewell, “limits this subgroup to phone numbers that bear no disposition code in the Call Records (at any time and on any account) that [he understands] could be potentially inconsistent with a wrong number call.”<sup>62</sup>
5. Group 3: 11,153 unique wireless phone numbers or “[p]ersons who received a prerecorded collection call from Verizon on a cellular telephone for which they both informed Verizon that it had been calling the wrong number via key-press responses to prerecorded prompts in the call and orally informed Verizon that it was calling the wrong number or should cease calling that number.”<sup>63</sup>
6. Group 3A: 7,816 unique wireless phone numbers or persons in Group 3 excluding “any person from Group 3 if any call record to or from the cellular telephone number at issue on any Verizon account has any tfh\_result or final\_status disposition other than those listed in Exhibit 1[,]” which again, according to Mr. Jewell, “limits this subgroup to

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<sup>60</sup> 5/3/2021 Jewell Report, ¶¶ 3, 16, and 30.

<sup>61</sup> 5/3/2021 Jewell Report, ¶¶ 3 and 17.

<sup>62</sup> 5/3/2021 Jewell Report, ¶¶ 3, 18, and 30.

<sup>63</sup> 5/3/2021 Jewell Report, ¶¶ 3 and 19.

phone numbers that bear no disposition code in the Call Records (at any time and on any account) that [he understands] could be potentially inconsistent with a wrong number call.”<sup>64</sup>

7. Group 4: 1,467 unique wireless phone numbers or “[p]ersons in group 3 who thereafter received at least one additional prerecorded collection call from Verizon on the same telephone number and concerning the same Verizon account.”<sup>65</sup>
8. Group 4A: 922 unique wireless phone numbers or “[p]ersons in group 3A who thereafter received at least one additional prerecorded collection call from Verizon on the same telephone number and concerning the same Verizon account” which again, according to Mr. Jewell, “limits this subgroup to phone numbers that bear no disposition code in the Call Records (at any time and on any account) that [he understands] could be potentially inconsistent with a wrong number call.”<sup>66</sup>
9. Group 5: 1,819 unique wireless phone numbers or “[p]ersons in Group 1 whose cellular telephone number is listed on two or more Verizon Wireless accounts that do not otherwise bear the same identifying information.”<sup>67</sup>

49. Mr. Jewell also opined that Ms. Breda is a member of each of the nine groups.<sup>68</sup>

50. I understand that among the unique telephone numbers (112,655) that are in Mr. Jewell’s Group 1 (the largest group, of which all other groups are a subset), 16,423 were Verizon MTNs on the date of every qualifying call to that number.<sup>69</sup> The call records associated

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<sup>64</sup> 5/3/2021 Jewell Report, ¶¶ 3, 20, and 30.

<sup>65</sup> 5/3/2021 Jewell Report, ¶¶ 3 and 21.

<sup>66</sup> 5/3/2021 Jewell Report, ¶¶ 3, 22, and 30.

<sup>67</sup> 5/3/2021 Jewell Report, ¶¶ 3 and 23.

<sup>68</sup> 5/3/2021 Jewell Report, ¶ 25.

<sup>69</sup> 5/26/2021 King Declaration.

with qualifying calls to these phone numbers should have been removed from Verizon's production.<sup>70</sup> As a result, these phone numbers do not belong in Mr. Jewell's Group 1.

51. That some of the numbers in Group 1 are Verizon MTNs and should have been removed from the data production would flow through to Mr. Jewell's other groups, potentially reducing their numbers as well.
52. I understand that it is Verizon's policy to call only Verizon MTNs and CBR Numbers that were provided by the customer.<sup>71</sup> I understand that of the remaining phone numbers in Group 1 (after removing the numbers found to be Verizon MTNs), approximately 99% have been verified as CBR Numbers in Verizon's systems.<sup>72</sup>

#### **B. Overview of Data and Information Upon Which Mr. Jewell Relyed**

53. Verizon produced three categories of data in this case:
  - i. One category is the records of calls from the LiveVox Dialer, produced by Verizon as VZW0121 UPDATED2. This data set includes 20,275,131 call records, dated from January 1, 2014 to September 1, 2017. Each call record includes over a hundred fields, including the account number to which the call was related, the telephone number dialed (if outbound—i.e., from the dialer to the phone number of the intended call recipient), the telephone number from which the call came (if inbound), the date and time of the call, the calling campaign with which the call was associated, and multiple disposition fields related to the outcome or status of the call.
  - ii. The second category of data provided by Verizon is the records from the Verizon Internal Dialer, produced by Verizon as VZW0123 UPDATED2 – VZW0155 UPDATED2. This data set includes records of 8,054,992 calls or attempted contacts dated from October 1, 2018 to December 31, 2020. These records include dozens of fields on each call, including the account number to which the call was related, the

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<sup>70</sup> 5/26/2021 King Declaration.

<sup>71</sup> 3/27/2020 Boulanger Declaration, ¶ 5, and Interviews with Cheryl Boulanger. The list of telephone numbers that are in Mr. Jewell's Group 1 but that I understand should have been removed from Verizon's production is attached as Exhibit A to 5/26/2021 King Declaration.

<sup>72</sup> 5/26/2021 King Declaration.

telephone number dialed (unlike the LiveVox Dialer, the Internal Dialer does not include inbound calls), the date and time of the call, and multiple fields of dispositions, among others. The disposition fields and values in the Internal Dialer are different from the fields and values in the LiveVox Dialer.

- iii. The third category of data produced by Verizon are account remarks records produced by Verizon as VZW0218 UPDATED (“Account Remarks”). I understand that this data set contains system generated remarks as well as the free form notes made by call agents, including free form notes made from calls in which the agents speak to customers or other call recipients. Based on my review of the Account Remarks data, each account may be associated with hundreds, or in some cases, thousands of notes taken on different days.
- iv. As already noted, the dialer data as produced (both from the LiveVox Dialer and the Internal Dialer) were to have excluded all calls to and from Verizon mobile telephone numbers at the time of the calls, and were to have excluded all calls associated with any calling campaign other than Verizon Wireless consumer collections campaigns. I understand that Account Remarks data were provided for every account on which a phone number was called in the data produced from the LiveVox Dialer and the Internal Dialer.<sup>73</sup>

54. To identify records that purportedly fit into his assigned groups, Mr. Jewell relied on certain fields in the dialer records and the Account Remarks records produced by Verizon.<sup>74</sup> Additionally, I understand that Mr. Jewell relied on “historical audit files” from a third party, Interactive Marketing Solutions, which Mr. Jewell used to purportedly identify whether each telephone number of interest was assigned to cellular telephone service at the time of the call(s) of interest.<sup>75</sup>

55. According to Mr. Jewell, the dialer records fields that were applicable to his assignment included “the date and time of a call transaction, the phone and account number involved,

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<sup>73</sup> Letter, Alison T. Holdway to Timothy Sostrin, re: Breda v. Cellco Partnership, C.A. 1:16-cv-11512, United States District Court for the District of Massachusetts, April 14, 2021 (hereafter, *4/14/2021 Production Letter*).

<sup>74</sup> *5/3/2021 Jewell Report*, ¶¶ 26-28. See also, *4/8/2021 Production Letter* and *4/14/2021 Production Letter*.

<sup>75</sup> *5/3/2021 Jewell Report*, ¶¶ 44-45.

and status descriptions reflecting who or what answered the call as well as the result of the transaction.”<sup>76</sup> With respect to the fields in the Account Remarks data that were applicable to his assignment, Mr. Jewell used those fields “identifying the account relevant to the call, the date and time of the record, and a ‘Remark Text’ variable.”<sup>77</sup>

56. There are multiple fields in the dialer data that provide disposition codes associated with each call. Based on a review of Mr. Jewell’s report and his computer programs that I requested after reviewing Mr. Jewell’s report, it appears that Mr. Jewell relied only on the disposition fields in the LiveVox data called “tfh\_result” and “answer\_type” and the disposition fields in the Internal Dialer called “final\_status” and “dialer\_result.”<sup>78</sup> He did not incorporate into his analysis the other disposition fields in the dialer data that he received.
57. As I will explain in Section VII, by failing to examine the all relevant fields and the entire set of remarks that were produced associated with each phone number, Mr. Jewell has both misinterpreted the fields he included in his analysis and has ignored contrary evidence contained in the unexamined data. First, fields in the dialer data ignored by Mr. Jewell include dispositions that indicate that Verizon called the right number, not a wrong number. In addition, examination of the full data, including the Account Remarks data associated with a small set of examples, demonstrates examples of calls in his “groups” in which Mr. Jewell’s key- word queries both misinterpreted the Account Remarks data he relied on and ignored other Account Remarks information that contradicted his conclusions. Analysis of the Account Remarks on a sample of phone numbers in Mr. Jewell’s groups also demonstrates that (1) review of the full record is a labor intensive, expertise intensive, and time intensive task for even a small number of phone numbers; and (2) even examination of the full record leaves open questions in some cases that would require additional discovery to attempt to fully resolve.

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<sup>76</sup> 5/3/2021 Jewell Report, ¶ 27.

<sup>77</sup> 5/3/2021 Jewell Report, ¶ 28.

<sup>78</sup> See, *breda\_analysis\_DRAFT.r*; *breda\_plaintiff\_analysis\_DRAFT.r*.

### C. Overview of Mr. Jewell's Analysis

58. Given the stipulated scope and interpretation of the datasets analyzed by Mr. Jewell,<sup>79</sup> Mr. Jewell's assembly of his Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A consists of:

Step 1: Counting telephone numbers associated with at least one outbound call with either:

- i. the "Call Recipient Says Wrong Number" notation in the "tfh\_result" field and "Wrong Party" or "person" notation in the "answer\_type" field for the LiveVox Dialer records, or
- ii. a notation starting with a "REACHED\_WRONG\_PARTY" prefix in the "final\_status" field and "DELIVERED\_PERSON" notation in the "dialer\_result" field for the Internal Dialer records.<sup>80</sup>

Step 2: Purportedly eliminating from the counts those telephone numbers that were not assigned to a cellular telephone service at the time of the identified outbound call, using the data from third party data vendor Interactive Marketing Solutions mentioned earlier.<sup>81</sup>

59. Steps 1 and 2 above created Group 1. I understand that Step 1 is intended to capture all calls on which, according to the stipulation quoted earlier in Section IV.B, the call recipient responded to an IVR menu on a debt collection call with the key presses 2 then 3 to indicate that the call recipient was not the party Verizon was intending to reach. Mr. Jewell refers to these calls as "Key Press Call Records."<sup>82</sup>

60. I will discuss Step 2 in Section X.

61. To create Group 1A, Mr. Jewell eliminated from the phone numbers in Group 1 those telephone numbers that

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<sup>79</sup> 3/26/2021 Stipulation; 4/8/2021 Production Letter, and 4/14/2021 Production Letter.

<sup>80</sup> 5/3/2021 Jewell Report, ¶¶ 35-43.

<sup>81</sup> 5/3/2021 Jewell Report, ¶¶ 44-46.

<sup>82</sup> 5/3/2021 Jewell Report, ¶ 43.

Step 3: at some point in time had calls with notations in either the “tfh\_result” field (in the LiveVox data) or the “final\_status” field (in the Internal Dialer) that could be, according to Mr. Jewell, interpreted as “potentially inconsistent with a wrong number call.”<sup>83</sup> Specifically, according to Mr. Jewell:

Any dialed tfh\_result or final\_status disposition that, on its face, referenced (a) authentication, (b) cash, payment, promise, or PTP, (c) right party, (d) validation, or (e) zip code was flagged, as were (f) any tfh\_result or final\_status dispositions that began with “agent” other than “AGENT - CUST WPC 1” and “AGENT – wrong number.” Any phone number in Group 1 with a flagged disposition in the Call Records at any time and on any account was excluded from Group 1A. [footnotes omitted]<sup>84</sup>

62. To create Group 2, Mr. Jewell eliminated from Group 1:

Step 4: those phone numbers to which there were no subsequent outbound calls (on the same account as the qualifying call) associated with:

- i. the “answer\_type” field notations of “machine,” “person,” “Right Party,” “Wrong Party,” and “Unidentified Party,” but not the “tfh\_result” field notation of “Answering Machine (Hung Up)” and “Fax”<sup>85</sup> in the LiveVox data and
- ii. the “dialer\_result” field notation of “DELIVERED\_MACHINE” or “DELIVERED\_PERSON but not the “final\_status” field notation of “KILL”<sup>86</sup> in the Internal Dialer data.

63. To create group 2A, Mr. Jewell eliminated the phone numbers from Group 1A that satisfy Steps 4 (i) and (ii) above.

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<sup>83</sup> 5/3/2021 Jewell Report, ¶ 30. Mr. Jewell did not provide an explicit list of the codes that he believes satisfies these criteria. Instead, he provided a list of all codes in the tfh\_result or final\_status fields that do *not* satisfy his criteria for a right party connect (i.e., that are “potentially inconsistent with a wrong number call”). His list of codes that do not satisfy his criteria for a right party connect are provided in his Exhibit 1.

<sup>84</sup> 5/3/2021 Jewell Report, ¶ 47.

<sup>85</sup> 5/3/2021 Jewell Report, ¶ 49.

<sup>86</sup> 5/3/2021 Jewell Report, ¶ 50.

64. To create Group 3, Mr. Jewell eliminated from Group 1 those telephone numbers that did not also have, according to Mr. Jewell's analysis,

Step 5: an account-level text remark entered by an agent within 15 minutes of the end of the qualifying call which was purportedly consistent with "an oral instruction" to an agent "indicating the number called was a wrong number and/or to cease calling it."<sup>87</sup>

65. To create Group 3A, Mr. Jewell eliminated from Group 3 those telephone numbers that satisfy Step 3 above.

66. To create Group 4, Mr. Jewell eliminated from Group 3 those telephone numbers that satisfy Step 4 above.

67. To create Group 4A, Mr. Jewell eliminated from Group 3A those telephone numbers that satisfy Step 4 above.

68. With respect to Group 5, Mr. Jewell's analysis consists of counting telephone numbers associated with at least one outbound call in the LiveVox data that qualifies the number for Group 1 (i.e., satisfies steps 1 and 2) and for which there are call records in the LiveVox data showing at least one call to the same telephone number but in an attempt to reach a different account that bears no "overlapping values of first name, last name, or email address [with the Qualifying Call account]."<sup>88</sup>

69. One way to summarize the relationship between Mr. Jewell's Groups 1, 1A, 2, 2A, 3, 3A, 4, 4A, and 5 is that the pool of potential phone numbers that may fall into one or more of Plaintiff's proposed classes is his Group 1, consisting of all phone numbers on which there

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<sup>87</sup> 5/3/2021 Jewell Report, ¶¶ 55-64. Mr. Jewell says in his report that he queried the Account Remarks dataset to identify records with character patterns "consistent with text roughly synonymous with" one or more of the phrases: "Wrong number," "Delete number," "Shouldn't call," and "Do Not Call." Mr. Jewell does not explain his selection of the "Wrong number," "Delete number," "Shouldn't call," and "Do Not Call" phrases (or disclose whether these phrases were provided to Mr. Jewell by Plaintiff's counsel), nor does he explain how his chosen programming syntax achieves Mr. Jewell's own "roughly synonymous" standard. *See also*, Agreed Upon Search Terms for Verizon Account Remarks, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC.

<sup>88</sup> 5/3/2021 Jewell Report, ¶¶ 71-75. I understand that Mr. Jewell attempted to remove any telephone numbers that "transitioned to or from landline between the date of the [Group 1] Qualifying Call and [the call to the same telephone number in an attempt to reach a different account with no overlapping identifying information]."  
5/3/2021 Jewell Report, ¶ 75.

was at least one call in which the recipient indicated via key presses (but not necessarily speaking to an agent) that he or she was not the intended called party. Groups denoted “A” have removed phone numbers for which there is a disposition code in a specific field of the dialer results on a call other than the Key Press call that indicates that the right party was reached. The “2” and “4” groups remove phone numbers from groups 1 and 3 respectively to which there were no subsequent connected calls after the purported “wrong number” call. The “3” and “4” groups remove phone numbers from groups 1 and 2 respectively for which there was no indication in the agent Account Remarks data that, according to Mr. Jewell, the call recipient gave an “oral instruction” indicating the number called was a wrong number and/or to cease calling it. Group 5 is also a subset of Group 1 but follows a wholly different set of criteria from the other groups, related to the same number having been called on a debt collection campaign for two different accounts.

## **VI. MR. JEWELL’S ANALYSIS DEMONSTRATES THAT PURPORTING TO IDENTIFY “WRONG NUMBER” CALLS VIA DISPOSITION CODES IS UNRELIABLE**

70. Mr. Jewell does not purport to offer a methodology for identifying individuals who were associated with any of Plaintiff’s purported classes proposed in her Complaint or the *12/5/16 Joint Report*. His report consists of a programming exercise performed at the direction of counsel. Mr. Jewell indeed does not reference the purported classes at all in his report, and he does not offer an opinion as to whether the analysis he conducted relates to the purported class definitions. Mr. Jewell does not offer any opinions as to what can be inferred about the calls made in the groups he assembles. I infer from Mr. Jewell’s report that Plaintiff may propose different classes from or additional classes to those defined in the Complaint and/or the *12/5/16 Joint Report*.
71. I infer from the classes proposed in the Complaint, and from the keywords and codes identified by Plaintiff that form the basis of Mr. Jewell’s analyses, that the purpose of the keywords and codes is to identify telephone numbers to which calls were made (1) where the phone number was not a number at which the customer could in fact be reached (a

“wrong number”); and/or (2) where the call recipient revoked consent to be called by Verizon.

72. The only method indicated by Plaintiff and Mr. Jewell to identify calls that were made to “wrong numbers” or individuals who purportedly instructed Verizon to stop calling is via select codes and key words chosen by Mr. Jewell that appear in the LiveVox data, Internal Dialer data, and Account Remarks data.
73. Parsing calling data to identify actual wrong number calls or calls on which the call recipient revoked consent to be called is not feasible using the methods adopted by Mr. Jewell and is not feasible without individual inquiry. The data themselves demonstrate that this is the case, as does the report of Mr. Jewell, as I discuss in the following sections.

**A. Plaintiff’s Designated Dispositions Cannot Determine Which Calls, If Any, Were to a Wrong Number**

74. The dispositions designated by Plaintiff as representing calls on which a call recipient pressed 2 and then 3—the “Key Press” calls—do not constitute a reliable indication that the call recipient was in fact not the party being sought or, if not the party, a number for which Verizon did not have consent to call. The dispositions associated with this key press sequence do not represent any verified indication or sworn statement that the wrong number was in fact reached, or any evidence from an authoritative database of “wrong numbers” (which does not exist), but rather represent only the unverified and unsworn claim by the call recipient via key presses in response to an IVR that he or she is not the intended recipient and the caller has reached a wrong number.
75. Of course, it is possible that some individuals misrepresent themselves in order to avoid talking to a debt collector. Indeed, Ms. Boulanger states that in a debt collection setting, it is very common for people not to tell the truth.<sup>89</sup> Observing that a call recipient pressed a sequence on an IVR that purports to indicate a “wrong number” cannot therefore be taken as dispositive that a wrong number was called.

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<sup>89</sup> 5/26/2021 Boulanger Declaration, ¶¶ 9-10.

76. But in addition, it is necessary in this case to recall that, because calls to and from the customers' mobile telephone number assigned by Verizon were to be removed from the data, and non-wireless calls are not in the scope of the case, the only calls in the case are those on which Verizon was attempting to reach its customers on wireless phone numbers that were not Verizon MTNs. In addition, since Verizon represents that it does not engage in skip tracing,<sup>90</sup> but only intends to call CBR Numbers provided by the customer, the calls at issue in the case are calls to wireless phone numbers that the customer provided that are not the customer's Verizon wireless number nor another Verizon wireless number (such as the number of a spouse whose wireless number is also with Verizon).
77. What phone numbers can a customer provide as a CBR Number to Verizon when the customer establishes a Verizon account, other than the customer's own Verizon wireless number in the account being established, or the Verizon wireless number to which he or an acquaintance subscribes? In some instances, the customer may provide a landline home phone; however, calls to landlines are not in the case and Mr. Jewell purportedly removed calls to landlines from the dialer data.<sup>91</sup> In some instances, the customer may provide a landline work phone; but, again, calls to landlines were purportedly removed by Mr. Jewell from the dialer data.
78. What remains are calls to CBR Numbers provided by customers that are not Verizon wireless numbers nor landline numbers. In some instances, the customer may have another wireless phone with another wireless service provider (when, for example, the Verizon customer's employer provides the Verizon customer with a non-Verizon cellphone), and may provide that number as a CBR Number. In other instances, the customer may provide the wireless phone number of a spouse, other family member, or other acquaintance.<sup>92</sup>
79. When a spouse, family member, or other acquaintance receives a debt collection phone call, they may consider it unwelcome and indicate via key presses that the caller has reached a "wrong number." However, that may not mean that the number provided was

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<sup>90</sup> 5/26/2021 Boulanger Declaration, ¶¶ 7-8.

<sup>91</sup> 5/3/2021 Jewell Report, ¶ 46.

<sup>92</sup> 5/26/2021 Boulanger Declaration, ¶ 8.

not one provided by the account holder as a CBR Number, or that Verizon did not have consent to call the number. Hence, one fact pattern that must be considered in the data is that called parties in this case may indicate to an IVR or directly to a call agent that they are not the intended party by indicating “wrong number” when in fact they are the family member or acquaintance whose number was provided by the Verizon customer as a number at which the customer “can be reached.”

80. As the forgoing discussions indicate, there are several reasons that the call recipient in this case may indicate on an IVR that he or she is not the intended recipient named in the IVR message. These include, among others:
  - i. The call recipient was the customer named in the IVR message and was reached on a non-Verizon wireless number he or she provided as a CBR Number but wanted to avoid talking to a debt collector.
  - ii. The call recipient was the spouse, family member, friend, or work associate of the customer named in the IVR message whose non-Verizon wireless phone number the Verizon customer gave as a CBR Number, and that person wanted to avoid talking to a debt collector;
  - iii. The call recipient was the spouse, family member, friend, or work associate of the customer named in the IVR message whose non-Verizon wireless phone number the Verizon customer gave as a CBR Number, and that person intended to indicate by the “wrong number” sequence that they were not the named customer and the named customer was not reachable at that number, not that it was a wrong number.
  - iv. The call recipient was the intended recipient but accidentally pushed the wrong button sequence.
  - v. The call recipient was not the named customer, did not know the named customer, and truthfully indicated as such via the button sequence 2, 3.
81. That calls with the key press codes are not limited to calls that in fact were wrong numbers is not just a theoretical concern but rather is demonstrated in the data.

82. First, Mr. Jewell's analysis itself demonstrates that the Key Press codes in the data do not reliably identify only those calls that genuinely were wrong number calls and that, instead, a substantial percentage are demonstrated within the dialer data sets themselves to be calls to the right number.
83. Mr. Jewell's "Group 1" consists of all phone numbers in the data on which a call was made to a (purportedly) wireless phone number and on which call the recipient pressed the 2, 3 sequence to indicate a "wrong number." But Mr. Jewell's analysis demonstrates (consistent with the scenarios outlined above) that the key press disposition code is not dispositive of true wrong numbers. As evidenced in the data, and as Mr. Jewell shows, some customers who press the 2, 3 sequence in response to the IVR in a later (or earlier) call or calls demonstrate that the called telephone number was in fact a correct number. The data demonstrate this because the data show many cases in which the same number (the purported wrong number) was dialed on another call or a call was made to Verizon from the same number regarding the same account, and on that call the call recipient verified that the right party was reached by, for example, initiating or completing a payment on the call, making a promise to pay, or initiating validation on the account.
84. Of his collection of 112,655 phone numbers in his Group 1 (those having received the Key Press disposition code), Mr. Jewell acknowledged that there are 36,307<sup>93</sup> phone numbers—32 percent—that were dispositioned with a right party indication in the dialer data on another call.<sup>94</sup>
85. I will explain later in this Section that Mr. Jewell applied an erroneously narrow understanding of the dialer data to identify and remove phone numbers on which there was a "right party" indication in the dialer data on another call. In fact, many more code combinations in the data indicate a promise to pay, actual payment, initiation of payment, account validation, or other indicator of a right party than the codes Mr. Jewell used in his analysis. But even applying Mr. Jewell's incomplete understanding of the data it is clear

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<sup>93</sup> Subtracting the 76,348 phone numbers in "Group 1A" from the 112,655 phone numbers in "Group 1", 36,307 phone numbers are removed. See, *5/3/2021 Jewell Report*, ¶¶ 46-48.

<sup>94</sup> *5/3/2021 Jewell Report*, ¶ 46.

that “wrong number” Key Press disposition codes are not determinative of phone numbers that were in fact wrong numbers, as evidenced by the fact that Mr. Jewell found, using only an incomplete set of codes that identify right parties, that *nearly a third* of those numbers with a “wrong number” designation also had a right party designation on a different call.

86. The correct inference from Mr. Jewell’s finding that nearly a third of numbers with a “wrong number” key press were found by reference to dispositions on other calls in the dialer data to not be wrong numbers is that the “wrong number” Key Press disposition codes in the data are not reliable for identifying *any* true “wrong number” telephone numbers.
87. Mr. Jewell attempts to account for the one third of phone numbers in his Group 1 for which he found potential evidence in the dialer data that the number was not a wrong number by creating Group 1A. Mr. Jewell constructed Group 1A by deleting from Group 1, all of the phone numbers for which he believes the data show a “right number” disposition on another call to or from the same number.
88. Group 1A is not limited to truly wrong numbers, however. Group 1A is not the subset of Group 1 phone numbers for which there is corroborating or affirmative evidence—let alone dispositive evidence—that the phone number is a wrong number. Rather, Group 1A is the subset of Group 1 phone numbers for which there is *not* (according to Mr. Jewell) *contradictory* evidence in certain disposition fields of the dialer data sets that it is *not* a wrong number. But even if Mr. Jewell’s understanding of the relevant codes were correct, an *absence of contradictory evidence that the number is not a wrong number is not evidence that the number is a wrong number*, for the simple reason that people who dishonestly or erroneously tell an IVR that it reached the wrong number will not necessarily make a promise to pay or otherwise admit to being the right party on a subsequent (or earlier) call.

89. The premise of Mr. Jewell's methodology is the logical fallacy of asserting something is true because it has not been proven false.<sup>95</sup> The logic of Mr. Jewell's analysis by which he creates Group 1A amounts to, by analogy, assuming that everyone who claims on a dating web site to be unmarried is in fact unmarried unless you find a recent wedding photo publicly posted on their Instagram page. The problem with that logic is that failure to find a wedding photo does not prove or even provide evidence that the person's claim of being single is true, because people who dishonestly claim to be single on a dating web site may not choose to post their wedding photos on Instagram.
90. Indeed, nothing in Mr. Jewell's multistep analysis, including his additional steps to create Groups 2, 2A, 3, 3A, 4, 4A, or 5, purports to incorporate any evidence that the claim that a wrong person was reached or a wrong number was called is actually true; rather, the steps only—at best—reinforce that a (potentially erroneous or mendacious) wrong number claim was made, and removes numbers for which he finds evidence in the dialer data sets indicating that the number was *correct*. But one cannot assume that the remaining numbers are genuinely wrong numbers by virtue of (what Mr. Jewell believes is) a lack of contrary evidence.
91. In addition, while Mr. Jewell consults the Account Remarks data to search for key words that he believes indicate an oral “wrong number” or “stop calling” instruction to an agent, *he never performs any analysis or search of the Account Remarks data for remarks associated with other calls to the same number, or even the remarks associated with the Key Press call itself, that might indicate a right number contact*. His only attempt to identify evidence of a “right number” connect is via (an incomplete review of) the dispositions in (a limited set of fields in) the dialer data, not via an examination of the agent-entered free form notes in the Account Remarks data. In none of his steps does he attempt to assess from the Account Remarks data whether there is evidence that a Key Press call was in fact a correct number.

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<sup>95</sup> Also referred to as *Argumentum ad Ignorantiam*. See, for example, Douglas N. Walton, “Burden of Proof,” *Augmentation* 2 (1988), pp. 237-239, at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1037.4361&rep=rep1&type=pdf>.

92. Moreover, Mr. Jewell’s “key word” search for evidence of an “oral instruction” that the number is a wrong number or to cease calling in the Account Remarks is just that—a mechanical key word search that does not involve reading the entire remark or set of remarks.<sup>96</sup> His process does not incorporate a review of the context in which the key words appear to determine what was apparently conveyed in the call. For example, if the key words were “bad number” and the text was “this is not a bad number,” Mr. Jewell’s formulaic methodology ignores the “not” and relies entirely on “bad number” to identify the comment as an indication of a wrong number. I will discuss examples of these circumstances in the data in Section VII.

93. That Mr. Jewell’s methodology is to assume a number is guilty (of being a wrong number) unless it is proven innocent (a right number) is found in his reliance on the disposition codes in his Exhibit 1. Mr. Jewell’s methodology for narrowing the Group 1 numbers to Group 1A is to exclude phone numbers for which a “right party” disposition appears in certain fields of the dialer data, but include all other phone numbers on which there are numerous ambiguous codes and key words on the calls other than the Key Press call. Mr. Jewell’s Exhibit 1 includes all the codes that appeared in the call records of the calls that he retains in Group 1A.<sup>97</sup> I refer to Mr. Jewell’s Exhibit 1 list of dispositions as the “acceptable” codes list because according to Mr. Jewell, phone numbers with calls with only those dispositions, other than on the Key Press call, are acceptable for including in Group 1A (and all of the groups designated “A”).

94. Codes that are on Mr. Jewell’s “acceptable” list include various dispositions that can be consistent with a right number or a wrong number. Exhibit A to the Declaration of Laurence Siegel (for LiveVox records) and Exhibit A to the Declaration of Lorne George, Sr. have numerous examples of these ambiguous codes (for Internal Dialer records) such as:

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<sup>96</sup> Mr. Jewell purports to perform a check on his analysis by conducting a “manual review” of 200 Account Remarks records. *5/3/2021 Jewell Report*, ¶ 66. The purpose of the review was to attempt to validate his methodology, not to be incorporated as a component of his methodology for every record. I discuss his “manual review” in Section VII.

<sup>97</sup> *5/3/2021 Jewell Report*, ¶ 48.

LiveVox: "answer_type" Internal Dialer: "dialer_result"	LiveVox: "tfh_result" Internal Dialer: "final_status"
person	Hung Up in Opening
person	Listened
machine	Machine Left Message
DELIVERED_PERSON	EXIT_HOLD_HUNG_UP
DELIVERED_PERSON	DELIVERED_PERSON
DELIVERED_PERSON	OPENING

For the above codes (and several others in Jewell Exhibit 1), Mr. Jewell effectively assumes that because there is no contrary evidence from the disposition codes that appear on calls to (or from) the same phone number (i.e., evidence from codes that indicate “on their face” that the calls were made to a right number), then they could not have been made to a right number. As Mr. Siegel and Mr. George point out, a conclusion about whether a right number (or wrong number) was reached cannot be made from the above disposition codes alone.<sup>98</sup>

95. The fact that Mr. Jewell’s Group 1 and Group 1A include purported “wrong number” calls that, according to the evidence in the data, cannot be assumed to be wrong numbers can be seen by way of several examples.
96. The fact that Mr. Jewell’s Group 1 and Group 1A include purported “wrong number” calls that, according to the evidence in the data, cannot be assumed to be wrong numbers can be seen by way of several examples.

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<sup>98</sup> 5/26/2021 Siegel Declaration, Exhibit A; 5/21/2021 George Sr. Declaration, ¶¶ 3-7.

97. For example, consider the phone number XXX-XXX-5063 associated with the account 7250XXXXXXXXXX that Mr. Jewell categorizes under Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A.<sup>99</sup>

- i. There is a call to this number on 7/17/2019 at 12:22 PM. A disposition of “REACHED\_WRONG\_PARTY\_TRANSFER\_REACHED\_AGENT” is denoted in the *Final\_Status* field of the dialer data. Mr. Jewell classifies this as his qualifying call.
- ii. There are no calls associated with this phone number that have disposition codes in the dialer data that, according to Mr. Jewell, would identify it as a right party call.
- iii. There are subsequent outbound connected calls that the Internal Dialer show for this phone number under the same account.
- iv. On the same date as the qualifying call, at 3:35 PM, there is an account remark that Mr. Jewell matches to the qualifying call. The account remark reads “**wrong party** contact -- Shaneka J./LAK/8646467 / (Jones, Shneka).” This remark was flagged in Mr. Jewell’s query because it contains the words “**wrong party**.<sup>100</sup>

However, Mr. Jewell fails to account for additional pieces of information related to this phone number. Namely:

- v. In the Internal Dialer data, for the qualifying call, the field *Agent\_Disposition* is denoted as “NO\_AGENT\_RESPONSE\_TIMEOUT,” indicating, according to Mr. George, that the caller did not necessarily connect to an agent on the qualifying call.<sup>101</sup>
- vi. Moreover, on three separate occasions (on 19th June 2018, 13<sup>th</sup> August 2018, and 18<sup>th</sup> June 2019), the account remarks indicate that the customer confirmed the phone number at issue, XXX-XXX-5063, as a CBR on her account.

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<sup>99</sup> This is “Example E” as discussed in *5/26/2021 Boulanger Declaration*.

<sup>100</sup> *5/3/2021 Jewell Report*, ¶ 56.

<sup>101</sup> *5/21/2021 George Sr. Declaration*, ¶ 6.K and Exhibit B.

98. Hence, notes in the Account Remarks indicate that on three different occasions the customer confirmed the phone number as a number on which she could be reached and that consequently, the dialer had reached a right number. By failing to review the Account Remarks data for information consistent with the number being correct, Mr. Jewell's methodology incorrectly identified this phone number as having no evidence contrary to it being a wrong number.

99. Other examples also demonstrate that adopting a mechanized approach for attempting to identify "wrong numbers" or revocations of consent is not reliable and requires individualized inquiry. The phone number XXX-XXX-9058 (associated with the account 0564XXXXXXXXXX) is part of Mr. Jewell's Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A.<sup>102</sup>

- i. This number had a qualifying call on 23<sup>rd</sup> October 2018 at 1:09PM, there were no other calls to this number that, according to Mr. Jewell, denoted that the number was a right number, and there were connected calls to this number after the qualifying call.
- ii. On the date of the qualifying call, Mr. Jewell matches a remark entered at 1:16PM denoted as "LIVEVOX **WRONG PARTY** UNABLE TO CONNECT.....-- MARISELA S./LAK/RC/RT/8579302." Mr. Jewell flagged this remark because it contains the words "WRONG PARTY."<sup>103</sup>

As with the previous example, an examination of the full set of facts demonstrates the infeasibility of conducting a mechanical exercise to arrive at a reliable determination of which numbers were wrong numbers (and/or for which consent to call was revoked).

- iii. Even the qualifying remark that Mr. Jewell matches indicates that an agent was not reached. According to Ms. Boulanger, the text "UNABLE TO CONNECT" in the qualifying remark means the agent did not speak with the call recipient on this call. This would disqualify the call from Groups 3, 3A, 4, and 4A.

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<sup>102</sup> This example is discussed in 5/26/2021 *Boulanger Declaration*, Example A.

<sup>103</sup> 5/3/2021 *Jewell Report*, ¶ 56.

iv. Moreover, a closer examination of the dialer records indicates that a day after the qualifying call, there is evidence of a promise to pay being initiated for the same account under the same phone number. The field “application\_status” in the Internal Dialer is denoted with

“START\_MAKE\_PROMISE\_TRANSFER\_REACHED\_AGENT.” I understand from the declaration of Mr. George that this text string (starting with “START\_”) represents that Verizon called the correct number.<sup>104</sup>

100. The data do not support an inference that this number was a wrong number, nor that the customer instructed an agent to stop calling. On the contrary, the evidence is more suggestive that the number was a right number.

101. Mr. Jewell’s analysis fails to capture the full context in other instances as well. For example, the phone number XXX-XXX-4365 (associated with the account 5883XXXXXXXXXX) is classified into Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A by Mr. Jewell.<sup>105</sup>

- i. Mr. Jewell identifies a qualifying call from the LiveVox dialer on 25<sup>th</sup> November 2014, at 12:18PM. Mr. Jewell identified no phone calls associated with this number on this account on which there is a right party disposition. There are connected calls to this number after the qualifying call.
- ii. Mr. Jewell identifies a qualifying remark from the Account Remarks data on the same date as the qualifying call at 12:31PM. The matched qualifying remark is “XXXXXX4365 **wrong number**, do not call lund.tempe / (Lund, hrystina).” Mr. Jewell flagged this remark because it contains the words “wrong number.”<sup>106</sup>

According to Ms. Boulanger, a thorough examination of the account remarks indicates that this narrative requires an individual inquiry.

iii. On May 19, 2014, the customer on the account informed a Verizon agent that she was getting divorced and wanted to make sure her account was not “manipulated”

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<sup>104</sup> 5/21/2021 *George Sr. Declaration*, ¶ 6.L and Exhibit B.

<sup>105</sup> This example is discussed in 5/26/2021 *Boulanger Declaration*, Example C.

<sup>106</sup> 5/3/2021 *Jewell Report*, ¶ 56.

by her “TO-BE EX HUSBAND.” On the same call, the customer authorized Verizon to allow her to-be ex-husband to take over a telephone number on the account but not to make any other changes to her account. The qualifying remark Mr. Jewell identifies in (ii), six months after the May 19 call, has no information on whom the Verizon agent spoke with and whether the call recipient was authorized to make changes to the account.

102. A mechanical analysis of the data is unable to account for the full picture and context surrounding each account and phone number. To that end, Mr. Jewell’s analysis does not (and cannot) reliably assert that the call recipient was in fact, the wrong party.

**B. Mr. Jewell’s Misunderstanding of the Disposition Codes He Relies on Results in Overinclusion in His Groups Even Under His Own Logically Flawed Methodology**

*i. Mr. Jewell misunderstands the use of the KILL code*

103. Mr. Jewell excludes from his Groups 1A, 2A, 3A, and 4A telephone numbers on which a call appears in the data to or from the same telephone number on which the “wrong number” Key Press occurred but that have a code that indicates that the right party was reached or some other indication that the number called was a right number. Among the set of calls that he considers as potentially having a “right number” indication, he excludes any call that has the code “KILL” in the “final\_status” field.<sup>107</sup> That is, the code “KILL” in the “final\_status” field is on the “acceptable” list.

104. Mr. Jewell indicates that he did not consider calls with “KILL” in the “final\_status” field as potential “right number” calls because he believes that such calls may have been terminated before the prerecorded message was played.<sup>108</sup> I understand from the Declaration of Mr. George that he is incorrect. The proper interpretation of the “KILL” code in the “final\_status” field requires consideration of both the “application\_status” field, and the “agent\_disposition” field, neither of which did Mr. Jewell consider. Depending on the codes populating or not populating all of the relevant fields, the KILL code in the

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<sup>107</sup> 5/3/2021 Jewell Report, ¶ 50.

<sup>108</sup> 5/3/2021 Jewell Report, ¶ 50.

“final\_status” field may not only indicate that a call connected, but that the call recipient confirmed that the call reached the right party.

105. For example, consider the following disposition combination in the internal dialer data:

dialer_result	application_status	final_status	agent_disposition
DELIVERED_PERSON	START_MAKE_PROMISE_TRANSFER_REACHED_AGENT	KILL	

106. This combination appears on calls in Mr. Jewell’s Group 1A, as well as 2A, 3A, and 4A, which is to say that Mr. Jewell did not consider any call that had this disposition sequence to provide evidence of a right number.

107. I understand from Exhibit A to Mr. George’s Declaration that the sequence means the dialer detected that a person answered the phone (“DELIVERED\_PERSON”). I further understand that the sequence “START\_” in the “application\_status” field indicates that the call recipient pressed “1” and accessed the self-service menu. Mr. George’s view is that this indicates that Verizon called the correct number.<sup>109</sup>

108. As another example, consider the sequence:

dialer_result	application_status	final_status	agent_disposition
DELIVERED_PERSON	REACHED_WRONG_PARTY_TRANSFER_REACHED_AGENT	KILL	PROMISE_TO_PAY

109. This combination appears on calls in Mr. Jewell’s Group 1A, as well as 2A, 3A, and 4A, which is to say that Mr. Jewell did not consider any call with this pattern as providing evidence of a call to a “right number.”

110. I understand from Exhibit A to Mr. George’s Declaration that this sequence means that the dialer detected that a person answered the phone (“DELIVERED\_PERSON”).<sup>110</sup> The person pressed “2” then “3” in the IVR call flow, indicating that the dialer had reached a

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<sup>109</sup> 5/21/2021 George Sr. Declaration, ¶ 6. L.

<sup>110</sup> 5/21/2021 George Sr. Declaration, Exhibit A.

wrong number.<sup>111</sup> The call was then transferred to an agent where a promise to pay was made, according to the “PROMISE\_TO\_PAY” disposition in the “agent\_disposition” field. Mr. George’s view is that Verizon dialed the correct number, based on this sequence of codes.<sup>112</sup>

111. Consider the following additional example:

<b>dialer_result</b>	<b>application_status</b>	<b>final_status</b>	<b>agent_disposition</b>
DELIVERED_PERSON	LISTENED_TRANSFER_REACHED _AGENT	KILL	NO_AGENT_RESPONSE NSE_TIMEOUT

112. I understand from Exhibit A to Mr. George’s Declaration that this sequence means that the dialer detected that a person answered the phone (“DELIVERED\_PERSON”).<sup>113</sup> The person then pressed “1” in the IVR call flow based on the text “LISTENED\_” in the “application\_status” field.<sup>114</sup> This means the person indicated to the IVR prompt that they were the person named in the IVR message.<sup>115</sup>

113. Mr. George’s Declaration includes various other examples of code sequences in the relevant set of disposition fields for which “KILL” is populated in the “final\_status” field and in which the call recipient indicated they were the right party either via a key-press of “1” or by a disposition code in the “application\_status” or “agent\_disposition” fields that contains indication of a payment, promise-to-pay, or some other code that is consistent with a right party connect.

114. By ignoring every call where “KILL” is populated on the “final\_status” field and ignoring other relevant fields, Mr. Jewell has both misunderstood the data and has misclassified calls that provide contradictory evidence of a wrong number call. Disposition sequences with the code “KILL” in the “final\_status” field but that have an indication of that the call reaching the right number appear on phone numbers in every one of Mr. Jewell’s groups.

*ii. Mr. Jewell has ignored numerous other disposition code patterns that*

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<sup>111</sup> 5/21/2021 George Sr. Declaration, Exhibit A.

<sup>112</sup> 5/21/2021 George Sr. Declaration, ¶ 6.

<sup>113</sup> 5/21/2021 George Sr. Declaration, Exhibit A.

<sup>114</sup> 5/21/2021 George Sr. Declaration, ¶ 6. G.

<sup>115</sup> 10/23/2020 Friedman Deposition, Ex. 14.

***indicate called parties identified themselves as “right party”***

115. Mr. Jewell’s groups are all based on the premise that when a call recipient answers a debt collection call from Verizon and presses “2” then “3” in response to the IVR prompts, that indicates that the call reached a wrong number. Mr. Jewell ignores the fact, however, that, as explained in Mr. George’s declaration, if the recipient of a call on the same phone number instead pressed “1” (“If this is [Customer], Press 1 now.”<sup>116</sup>) the call recipient asserted that he or she is the intended recipient of the call.<sup>117</sup> There are numerous paths the call could take at that point, and numerous disposition codes in the disposition fields that trace the path of the call, but all of them follow the person answering the call first indicating by a key press that they were the person Verizon intended to call.

116. For example, there are several phone numbers in Mr. Jewell’s Group 1A as well as 2A, 3A, and 4A on which other calls to the same number exhibited the disposition sequence below:

<b>dialer_result</b>	<b>application_status</b>	<b>final_status</b>	<b>agent_disposition</b>
DELIVERED_PERSON	LISTENED_TRANSFER_REACHED_AGENT	LISTENED_TRANSFER_REACHED_AGENT	NO_AGENT_RESPONSE_TIME_OUT

117. I understand from Mr. George’s declaration that the sequence means the dialer detected that a person answered the phone (“DELIVERED\_PERSON”).<sup>118</sup> Any sequence of codes where the “application\_status” field begins with the text “LISTENED” corresponds to calls where the call recipient pressed “1” in the IVR call flow, indicating that they were the “right party.”<sup>119</sup>

118. Mr. George’s declaration contains numerous other examples of code sequences that indicate the call recipient pressed “1” to the prompt at the beginning of the call, indicating

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<sup>116</sup> 10/23/2020 Friedman Deposition, Ex. 14.

<sup>117</sup> 5/21/2021 George Sr. Declaration, ¶¶ 6.B, G, I, and L.

<sup>118</sup> 5/21/2021 George Sr. Declaration, Exhibit A.

<sup>119</sup> 5/21/2021 George Sr. Declaration, ¶ 6.G; 10/23/2020 Friedman Deposition, Ex. 14.

that they were the right party.<sup>120</sup> Mr. Jewell failed to account for these code sequences in his attempt to remove potential “right party” calls to phone numbers in his groups.

*iii. Mr. Jewell ignored numerous dispositions in which the call recipient indicated that they know the named subscriber, suggestive of a right number*

119. If, instead of pressing “1” at the IVR prompt “If this is [Customer], press 1 now,” the customer pressed 2 (“If this is not [Customer], press 2 now”) and thereafter pressed either 1 (“If you need some time to bring [Customer] to the phone, please press 1”) or 2 (“If [Customer] is not available, press 2”), there is a reasonable inference that at least in some cases the intention of the call recipient was to indicate that he or she knew the customer but that the customer was not immediately available to come to the phone. These also suggest a right party connect and, at a minimum, create a need for further, individual inquiry.

120. There are numerous codes on Mr. Jewell’s Exhibit 1—the codes that he deems to be not indicative of a right party connect—that are associated with either a “press 1” action (as discussed above) or a “press 2 then 1” or “press 2 then 2” action by the call recipient. For example, consider the code sequences below:

<b>dialer_result</b>	<b>application_status</b>	<b>final_status</b>	<b>agent_disposition</b>
DELIVERED_PER SON	EXIT_HOLD_HUNG_UP	EXIT_HOLD_HUNG_UP	
DELIVERED_PER SON	CUSTOMER_NOT_AVAIL ABLE_HUNG_UP	CUSTOMER_NOT_AVAIL ABLE_HUNG_UP	

121. Both of these code sequences appear in all of Mr. Jewell’s groups because Mr. Jewell failed to recognize that calls with these code sequences provide some, if not determinative, evidence that the call was a right number. According to Mr. George’s declaration, the first row in the example above represents that a person answered the phone

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<sup>120</sup> 5/21/2021 George Sr. Declaration, ¶¶ 6.B, G, I, and L.

(“DELIVERED\_PERSON”),<sup>121</sup> then pressed “2,” then “1” to the subsequent prompts, indicating that they needed more time to bring the customer to the phone.<sup>122</sup> For the second sequence, a person answered the phone (“DELIVERED\_PERSON”),<sup>123</sup> then pressed “2,” then “2” to the subsequent prompts, indicating that the customer was not available at the time of the call.<sup>124</sup>

122. Mr. George’s declaration contains numerous other examples of code sequences that indicate the call recipient pressed “2” then “1,” or “2” then “2” to the call prompt, indicating that they either needed more time to bring the customer to the phone or that the customer was not available.<sup>125</sup> In both scenarios, the responses are suggestive that the call recipient knew the customer whom Verizon was trying to reach, Verizon was calling a CBR Number, and was not calling a wrong number. Mr. Jewell failed to account for these code sequences in his attempt to remove potential “right party” calls to phone numbers in his groups.

## **VII. MR. JEWELL’S FURTHER FUNNELING OF THE DATA INTO GROUP 3 AND ITS SUBSETS VIA SEARCHES FOR SPECIFIC TEXT STRINGS IN THE ACCOUNT REMARK DATA REINFORCES THE CONCLUSION THAT “WRONG NUMBER” AND “REVOCATION OF CONSENT” CALLS CANNOT BE DETERMINED IN A MECHANICAL FASHION WITHOUT INDIVIDUAL INQUIRY**

123. To create Group 3 (and, consequently, its subsets Groups 3A, 4, and 4A), Mr. Jewell searched the text notes in the Account Remarks dataset that relate to the phone numbers identified in Group 1 (the phone numbers that received a “Key Press” call) to find agent notes that were proximate in time to the purported “wrong number” Key Press calls and that purportedly indicate that “both a Key Press and an oral instruction were made to Verizon indicating the number called was a wrong number and/or to cease calling it.”<sup>126</sup>

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<sup>121</sup> 5/21/2021 *George Sr. Declaration*, Exhibit A.

<sup>122</sup> 5/21/2021 *George Sr. Declaration*, ¶ 6. E.

<sup>123</sup> 5/21/2021 *George Sr. Declaration*, Exhibit A.

<sup>124</sup> 5/21/2021 *George Sr. Declaration*, ¶ 6. C.

<sup>125</sup> 5/21/2021 *George Sr. Declaration*, ¶¶ 6.C, E, F.

<sup>126</sup> 5/3/2021 *Jewell Report*, ¶ 64. The agent-entered free form notes in the Account Remarks data do not necessarily identify the telephone number or call to which the notes apply. Hence, Mr. Jewell sought to connect free form

That is, Group 3 consists of the subset of Group 1 phone calls in which the representation by the call recipient via key presses to the IVR that the call reached a wrong number is purportedly repeated orally to the agent or that the call recipient reached the agent to ask the agent not to call the number any more.

124. There are several defects with Mr. Jewell's methodology for identifying the phone numbers that comprise Group 3.
125. First, Mr. Jewell asserts that the key words he searches for in the Account Remarks data indicate that an "oral instruction" was provided that the number was a wrong number or to cease calling the number.<sup>127</sup> In fact, by failing to review the entire record related to the call in question, Mr. Jewell counted in Group 3 (and its subsets 3A, 4, and 4A) calls that in fact never reached an agent at all. Ms. Boulanger's declaration identifies several examples of phone numbers on which Mr. Jewell asserted the call recipient spoke to an agent and made an "oral instruction" but for which the notes in the Account Remarks indicate customer did not speak to an agent at all. I reproduce some of those examples below and have highlighted in red the query terms that Mr. Jewell used to identify the remarks as purportedly indicating that an "oral instruction was made" (the red is not in the original). Please note that the names in the remarks are those of the agent, not the name of the call recipient or account holder.<sup>128</sup>
  - i. "VERIZON DIALER **WRONG PARTY** CALL, PRESSED 1, DID NOT CONNECT, HUNG UP ..... JENNIFER A./LAK/RC/RT/8541940", for the phone number XXX-XXX-8676 and account number 3889XXXXXXXXXX. Mr. Jewell categorizes this phone number into Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A. This is example "Y" in Ms. Boulanger's declaration.

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notes to calls that appear in the dialer records by assuming that notes whose time stamp (adjusting for time zones, if necessary) in the Account Remarks data indicates the notes were made within 15 minutes of the end of a call that appears in the dialer records were notes that pertain to that call. I understand that Mr. Jewell also checked to determine if there were any other calls on any phone number associated with the same account within the 15-minute window around the call notes entry that could have resulted in the notes entry. 5/3/2021 Jewell Report, ¶¶ 62-63.

<sup>127</sup> 5/3/2021 Jewell Report, ¶ 64.

<sup>128</sup> Interview with Cheryl Boulanger.

- ii. “LIVEVOX **WRONG PARTY** UNABLE TO CONNECT.....--MARISELA S./LAK/RC/RT/8579302” for the phone number XXX-XXX-9058 and account number 56498XXXXXXXXXX. Mr. Jewell categorizes this phone number into Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A. This is example “A” in Ms. Boulanger’s declaration.
- iii. “**WRONG PARTY** CALL .. UNABLE TO CONNECT” for the phone number XXX-XXX-4210 and account number 9234XXXXXXXXXX. Mr. Jewell categorizes this phone number into Groups 1, 2, 3, and 4. This is example “G” in Ms. Boulanger’s declaration.

126. Second, review of the Account Remarks data in their entirety demonstrates that Mr. Jewell’s key words do not necessarily capture the apparent content of the conversation that occurred with the agent, and that taking the key words out of context can be misleading. Indeed, in some cases, the content of the conversations appears to be quite different from providing an oral instruction to cease calling the number.

127. For example, in her Fifth Declaration, Cheryl Boulanger has provided several examples that appear in Mr. Jewell’s groups that demonstrate that Mr. Jewell’s mechanical exercise of searching free-form notes for confirmation of a wrong number call is not reliable because it can result in a misinterpretation of account remarks, including:

- i. Mr. Jewell categorizes the phone number XXX-XXX-7568 (associated with account 2247XXXXXXXXXX) into Groups 1, 2, 3, and 4. The phone number meets the Group 3 criteria by having a qualifying remark (associated with a qualifying call) on 20<sup>th</sup> February 2016. This example is example “M” in Ms. Boulanger’s declaration. The qualifying remark identified by Mr. Jewell’s search program is:

“XXX-XXX-7568; LIVEVOX CALL, CONTACT PROVIDING XXXXXX3653 AS NUMBER WE WERE CALLING AND ADV **BAD CBR**. THE NUMBER IS NOWHERE IN SYSTEM. RECOMMENDED CONTACTING SERVICE PROVIDER TO **STOP CALL FORWARDING** TO THE PHONE NUMBER. / (VARNADO, BRYAN)”

The terms “BAD CBR” and “STOP CALL” are what qualify this remark in Mr. Jewell’s analysis.<sup>129</sup> The agent notes that he could not locate the phone number suggested by the caller in the associated account, which, according to Ms. Boulanger, indicates that the number the caller was asking to be removed was not the number that was called. Further, given the phone number does not qualify into “Group 1A”, by Mr. Jewell’s definition, the phone number has a “Right Party” disposition on another call.

- ii. Mr. Jewell categorizes the phone number XXX-XXX-1855 (associated with account 8248XXXXXXXXXX) into Groups 1, 2, 3, and 4. The phone number meets the Group 3 criteria by having a qualifying remark (associated with a qualifying call) on 16<sup>th</sup> December 2015. This example is example “F” in Ms. Boulanger’s declaration. The qualifying remark identified by Mr. Jewell’s search program is:

“MDN XXX-XXX-7152:CCI ABOUT PHONE NOT WORKING  
INFORMED CUST OF PAST DUE AND WILL FOLLOW UP WITH  
CUST ON MONDAY TO HAVE PHONE REMOVED FROM LOST  
AND STOLEN”

The term “PHONE REMOVED” is what qualifies this remark in Mr. Jewell’s analysis.<sup>130</sup> However, the “PHONE REMOVED” remark is referencing a device being removed from “LOST AND STOLEN” rather than a request that the phone number be removed from an account because it was a wrong number or because the customer was requesting that Verizon cease calling.

- iii. Mr. Jewell categorizes the phone number XXX-XXX-1919 (associated with account 5730XXXXXXXXXX) into Groups 1, 1A, 3, and 3A. The phone number meets the “Group 3” criteria by having a qualifying remark (associated with the qualifying call) on 13<sup>th</sup> January 2015. This example is example “R” in Ms. Boulanger’s declaration. The qualifying remark identified by Mr. Jewell’s search program is:

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<sup>129</sup> 5/3/2021 Jewell Report, ¶ 56-58.

<sup>130</sup> 5/3/2021 Jewell Report, ¶ 58.

“Spoke with Tara TXXXXX, is the mother of the account holder asked that we **stop calling** 5 to 6 times a day while she.apos ;s at work and adv she can.apos;t be getting call throughout the day. / (Lewis, Jajuan)”<sup>131</sup>

iv. The term “stop calling” is what qualifies this remark in Mr. Jewell’s analysis.<sup>132</sup> However, reviewing the remark in full shows that the recipient of the call did not indicate that the number called was a wrong number; on the contrary, the call recipient indicated that she was the mother of the account holder. Neither did she appear to ask that Verizon stop calling entirely but rather complained about the timing and frequency of the calls. Mr. Jewell categorizes the phone number XXX-XXX-1118 (associated with account 8260XXXXXXXXXX) into Groups 1, 1A, 2, 2A, 3, 3A, 4, and 4A. The phone number meets the “Group 3” criteria by having a qualifying remark (associated with the qualifying call) on 11<sup>th</sup> December 2020. This is example “Z” in Ms. Boulanger’s declaration. The qualifying remark identified by Mr. Jewell’s search program is:

“Non-Authorized User : KRISTI GXXXX//Gene CXXXX on the acc is no longer the owner//xfer to care//cx reqs to **stop calling** her number// / (Flores, Pristina Jaira)”

The term “stop calling” is what qualifies this remark in Mr. Jewell’s analysis.<sup>133</sup> Reviewing the remark in full demonstrates Mr. Jewell’s misinterpretation of what apparently transpired on this call. According to Ms. Boulanger, the call recipient in this instance was not an authorized user on the account but was asking the agent to remove a phone number from the customer’s account. The agent could not honor the call recipient’s request to remove someone else’s number from that other person’s account (and consequently, stop calling them) because the call recipient to whom the agent was speaking was not authorized by the customer to make such changes to the

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<sup>131</sup> Name masked to protect confidentiality.

<sup>132</sup> 5/3/2021 Jewell Report, ¶ 58.

<sup>133</sup> 5/3/2021 Jewell Report, ¶ 58.

account. Mr. Jewell's analysis assumes incorrectly that the call recipient was asking for their own number to be removed.

128. Mr. Jewell effectively acknowledges that a mechanical key word search ignores context, and acknowledges that a full review of the Account Remarks would be infeasible on a class wide basis. In his report Mr. Jewell indicates that in an attempt to validate his process he selected a sample of 200 records for "manual" review.<sup>134</sup> He does not report whether his "manual" review of 200 remarks encompassed the entire set of remarks for each account in which he found a proximate Account Remarks note, or whether his "manual" review encompassed only a review of the one remark that he associated with the Key Press call. Whether or not he reviewed the entire set of remarks for an account or just the note associated with the Key Press call, the fact that he chose to review only 200 out of 11,153 phone numbers that he believes qualify for Group 3<sup>135</sup> amounts to an admission that manual review is not practicable for determining a class with thousands of purported members.
129. Indeed, while Mr. Jewell purports to offer an expert opinion that, based on his review of the Account Remarks notes for a small sample of records, none of the records he reviewed were "inconsistent records," Mr. Jewell does not indicate in his biographical materials any expertise interpreting notes taken by call agents on collections campaigns. Ms. Boulanger, a former Senior Manager in Collections at Verizon, indicated that it required approximately 25 hours for her and others to review the call data and Account Remarks for the fewer than 30 accounts she described in her declaration and to understand what transpired in relation to the Key Press call, to the extent it was feasible to understand from the notes at all.<sup>136</sup> And in contrast to the "review" by Mr. Jewell, Ms. Boulanger did find in her review of a sample of Account Remark notes that Mr. Jewell's understanding of the account activity was incorrect in several instances, as I noted above.
130. I am able to discuss the examples in this report based on the Declaration of Ms. Boulanger and many hours of discussions with her and other subject matter experts within Verizon.

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<sup>134</sup> 5/3/2021 Jewell Report, ¶ 66.

<sup>135</sup> 5/3/2021 Jewell Report, ¶¶ 65-66.

<sup>136</sup> 5/26/2021 Boulanger Declaration, ¶ 17.

As the examples indicate, as well as the Declarations of Ms. Boulanger, Mr. George, and Mr. Siegel, determining what the call notes in the Account Remarks data mean and whether they constitute an oral instruction to cease calling the number, that the number is a wrong number, or something else, would require individual review by someone with knowledge and experience with the work performed by the agents.<sup>137</sup>

131. In addition to the methodological defects applied by Mr. Jewell in his use of the Account Remarks data, a conceptual defect with the use of Mr. Jewell's key words to search the Account Remarks data to narrow the phone numbers to those that are definitively "wrong numbers" is that even if the key words in the Account Remarks data that Mr. Jewell queried provided definitive proof that the call recipient gave an oral representation that the phone number called was a wrong number (which, as I just explained, they do not), such a representation provides no additional evidence that the number called was in fact a wrong number. Someone telling an agent that she called a wrong number or reached the wrong party does not provide additional evidence over and above the Key Press itself that the agent called a wrong number or reached a wrong party. This is because a person who mistakenly or dishonestly tells Verizon via a key press that Verizon has the wrong number or wrong party can also, in principle, make the same representation to an agent.
132. The fact that phone numbers in which a call recipient spoke to an agent and made an "oral instruction" does not demonstrate that the call was a wrong number is, again, demonstrated by Mr. Jewell's own analysis. In Group 3A, Mr. Jewell further limited the phone numbers in Group 3 by removing those that had a "right number" coded call using the same "right number" disposition codes in the LiveVox Dialer and Internal Dialer data that he applied to create group 1A.<sup>138</sup> He created Group 3A by removing phone numbers from Group 3 for which there is evidence that the phone numbers are *not* wrong numbers because someone was reached on the same number for the same account on another call and the person admitted to being the right party via a promise to pay, verifying the account, or other indicia recognized by Mr. Jewell as identifying a right party.

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<sup>137</sup> 5/26/2021 Boulanger Declaration, ¶ 17.

<sup>138</sup> 5/3/2021 Jewell Report, ¶ 67.

133. All of the errors that I discuss in sections above regarding the omissions in his list of “right number” codes and his misunderstanding and misuse of the Dialer data sets apply equally to his creation of Group 3A as to his creation of Group 1A and, as a result of those errors, he undercounts the phone numbers in Group 3 that have right number designations. In addition, for the reasons I discussed above, Mr. Jewell overcounts the phone numbers in Group 3 that actually reached an agent to make an oral representation. But even despite those errors, Mr. Jewell’s analysis also shows that, first, by his own numbers, 90 percent of the call recipients that pressed the “wrong number” key sequence in response to IVR prompts, and are therefore in Group 1, did not choose to stay on the phone long enough to indicate orally to the agent that the call was a wrong number.<sup>139</sup> And second, even of the less than 10 percent of phone numbers that had a “Key Press” call that *also* had a proximate “oral instruction” identified by Mr. Jewell (i.e., the numbers he assigns to Group 3), *30 percent had a “right number” code on another call* according to Mr. Jewell’s own analysis based on his limited set of right number codes to or from the same telephone number.<sup>140</sup> If Mr. Jewell had applied a more accurate set of right number indicia using all of the relevant fields in the data and applying a correct understanding of the entries in the data fields the percent of Key Press Calls that went to an agent would be even lower and the percent of Group 3 numbers that would be associated with right number indicators on other calls would be even higher.

134. This result—that some phone numbers in Group 3 demonstrably had right party indications on other calls—demonstrates that the “Key Press” and the “oral instruction” do not determine that a call was a wrong number. But, again, none of the phone numbers that did *not* show a “right number” call in the data were necessarily wrong numbers either. Those may all have been phone numbers in which the call recipient never had another call from Verizon, never again answered the phone, or chose on subsequent calls to continue claiming to be a wrong number. Indeed, these could have been phone numbers that were

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<sup>139</sup> 101,502/112,655, See, 5/3/2021 Jewell Report, ¶¶ 15, 19.

<sup>140</sup> 1 – 7,816/11,153, See, 5/3/2021 Jewell Report, ¶¶ 65-67.

removed from the dialer because the call recipient paid the debt via the web site, mail, or some other means that would not be captured by the dialer.

135. Moreover, as I discussed earlier, Mr. Jewell queried the Account Remarks data for indicators of “wrong numbers” or instructions to cease calling, but did not query or examine the Account Remarks data for indications that the number was a right number. Mr. Jewell’s method for identifying purported “right number” indications was limited to analysis of (a limited number of) the dispositions in certain fields in the *dialer* data; he did not attempt to scrutinize the account notes in the Account Remarks data to determine if they provided contradictory evidence of a wrong number. As Ms. Boulanger indicates in her Fifth Declaration, reviewing account notes to understand the context of specified key words and to assess what transpired on other calls to the same number would be a highly individualized exercise requiring specialized expertise, and as discussed earlier, and as acknowledged by Mr. Jewell, there is no definitive means of connecting the Account Remarks to specific calls in any event.<sup>141</sup>

### **VIII. MR. JEWELL’S STEPS TO REMOVE PHONE NUMBERS WITHOUT CALLS SUBSEQUENT TO THE “WRONG NUMBER” CALLS DO NOT IMPROVE THE INFERENCE THAT A NUMBER WAS A WRONG NUMBER**

136. As I described in Section V, Mr. Jewell applies another screen to narrow down the phone numbers in his groups further by removing phone numbers that purportedly received no calls after the relevant “wrong number” calls (Groups 2, 2A, 4, and 4A).

137. After identifying calls that received a “Key Press” indication of a “wrong number,” that also had a proximate “oral confirmation,” but after removing phone numbers that also had a “right party” code on another call and removing phone numbers that received no calls subsequent to the purported Key-Press-plus-oral-conformation call, Mr. Jewell is left with 922 phone numbers in his Group 4A.<sup>142</sup>

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<sup>141</sup> 5/26/2021 *Boulanger Declaration*, ¶ 17; 5/3/2021 *Jewell Report*, ¶¶ 62-63.

<sup>142</sup> 5/3/2021 *Jewell Report*, ¶ 70; I estimate that of the 922 phone numbers in Mr. Jewell’s Group 4A, at least 247 would be removed if Mr. Jewell were to rerun his analysis after removing the Verizon MTNs that were recently discovered in the produced data.

138. The steps related to removing phone numbers for which no subsequent calls were made do not improve the inference that the calls to these 922 numbers in Group 4A were wrong number calls or calls that occurred after the call recipient may have revoked consent. The phone numbers that remain in Group 4A (and Group 4) cannot be interpreted as necessarily being “wrong number” phone numbers to which calls were made after revocation of consent for the same reasons that phone numbers in Groups 1, 1A, 2, 2A, 3, and 3A cannot definitively be interpreted as wrong numbers or calls on which the call recipient revoked consent. There is evidence in the data that called parties do misrepresent the number as a wrong number, and even after removing phone numbers for which there is affirmative evidence in the dialer data of being correct numbers, there is no evidence that the remaining numbers are in fact wrong other than the keys pressed by the persons answering the calls in response to the IVR or what they asserted to an agent. In addition, Mr. Jewell’s method for identifying calls on which the call recipient spoke to an agent to revoke consent to call is faulty and erroneously includes numbers on which the call recipient did not speak to an agent. For those calls on which a call recipient spoke to an agent, Mr. Jewell’s mechanical identification of key words does not reliably identify calls on which the call recipient allegedly revoked consent to be called, as the examples I discussed demonstrated.
139. Review of the data indicates that the phone numbers in even the most filtered group—4A—include indicia that Verizon did *not* call the wrong number. For example, the phone number XXX-XXX-5063 and phone number XXX-XXX-9058 that I discussed earlier satisfy the criteria of group 4A, despite the fact, as already discussed, the evidence indicates that these were right numbers.

## **IX. MR. JEWELL’S GROUP 5 DOES NOT RELIABLY OR LOGICALLY IDENTIFY WRONG NUMBERS OR REVOCATION OF CONSENT**

140. Neither Plaintiff nor Mr. Jewell has so far identified any theory of liability that would relate to Mr. Jewell’s Group 5. Group 5 numbers are those that received a Key Press code on at least one call and appear as associated with more than one account number in the Live Vox Dialer and/or Internal Dialer data. That is, these are telephone numbers that were provided as CBR Numbers on more than one account, both of which were in collections at some

point during the period of the data and both of which were attempted to be reached on the same CBR Number.

141. I am aware of no reason that because a telephone number was provided as a CBR Number by two different account holders that a Key Press call on that number would provide dispositive evidence that the number was a “wrong number” on either or both accounts. Ms. Boulanger explains in her Fifth Declaration that there are many reasons that a CBR Number would be listed on separate accounts that do not have the same identifying information.
142. Mr. Jewell provides no screens or criteria to the inclusion of phone numbers in Group 5 other than having a Key Press call and appearing on more than one account in the dialer data. None of the screens that he applies to his Group 1 phone numbers to create any of his other groups were applied to the numbers that he includes in Group 5, such as removal of phone numbers for which there is evidence of a right party connect on another call to the same number, or evidence that the call recipient spoke to an agent to make an “oral instruction.”
143. For example, a telephone number can be in Group 5 even if it received a “right party” designation on a subsequent call to the Key Press call. A telephone number can be in Group 5 if it had a Key Press call on one account, then had a “right party” designation on another call pertaining to the same account, and never had a “wrong number” designation on the calls associated with the other account. A telephone number can be in Group 5 if it never reached an agent regarding either account, and therefore there was no opportunity for the call recipient to revoke consent with respect to either or both accounts.
144. For example, the phone number XXX-XXX-0565 has calls in the LiveVox data associated with two different accounts: 7885XXXXXXXXXX and 3884XXXXXXXXXX. For the “7885” account, there are no calls to the phone number that received a “wrong number” designation.” However, the same phone number was dialed on 26<sup>th</sup> January 2017 and received a “wrong number” key press designation.

- i. In March 2015, the phone number was dialed with respect to the “7885” account where the “tfh\_result” field is dispositioned as “AGENT – PTP Arranged,” a code Mr. Jewell considers to be a right party indicator.<sup>143</sup>
- ii. Moreover, even under the “3884” account where a wrong number disposition is observed on 26<sup>th</sup> January 2017, there is a right party indicator (according to Mr. Jewell’s methodology) two days later, on 28<sup>th</sup> January 2017, where a call is dispositioned with “Operator Transfer (Credit Card Payment).”<sup>144</sup>

In this example evidence indicates that the phone number was a right number under both accounts (even by Mr. Jewell’s own classification of right party codes).

145. Similarly, the phone number XXX-XXX-3181 has calls in the LiveVox dialer associated with two accounts: 6880XXXXXXXXXXXX and 6876XXXXXXXXXXXX. As with the previous example, a wrong number disposition is only observed for one of the two accounts: on 11<sup>th</sup> August 2014 for the “6876” account.

- i. On 2<sup>nd</sup> July 2014, a call to the same phone number for the “6880” account is dispositioned with “AGENT – PTP Arranged” in the “tfh\_result” field, a code Mr. Jewell considers to be a right party indicator.<sup>145</sup>
- ii. On 9<sup>th</sup> August 2014, two days before the supposed wrong number call, a call to the same phone number for the “6876” account is dispositioned with “AGENT – PTP Arranged” in the “tfh\_result” field, a code Mr. Jewell considers to be a right party indicator.<sup>146</sup>

Hence, evidence for this phone number suggests that it was a right number for both accounts. Even limited to Mr. Jewell’s definition of right party codes, the phone numbers had calls designated with right party codes for both accounts.

146. According to the Fifth Declaration of Ms. Boulanger, there are many reasons that a phone number might appear as a CBR on multiple accounts, such as multiple account holders

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<sup>143</sup> The “tfh\_result” “AGENT – PTP Arranged” is not part of Exhibit 1 to Jewell report.

<sup>144</sup> The “tfh\_result” “Operator Transfer (Credit Card Payment)” is not part of Exhibit 1 to Jewell report.

<sup>145</sup> The “tfh\_result” “AGENT – PTP Arranged” is not part of Exhibit 1 to Jewell report.

<sup>146</sup> The “tfh\_result” “AGENT – PTP Arranged” is not part of Exhibit 1 to Jewell report.

from the same company using a company phone number as the CBR; or multiple account holders from the same family with different names using, for example, the same family member's telephone number as their CBR.

147. Ms. Boulanger's examples from the phone numbers included in Mr. Jewell's Group 5 describe an instance in which the two accounts in which the same CBR appears belong to people who appear to be married to each other, a fact that she determined from examination of the notes from the agents in the Account Remarks. She also describes an instance in which the person named as the subscriber on one account is the same person named as an account manager (but not the subscriber) on the other account. In addition, the two individuals have the same physical address.
148. Mr. Jewell takes pains to justify his methodology for determining whether two people on two separate accounts are different people. But the examples just discussed make clear that concluding that two people have different names and email addresses—the only criteria applied by Mr. Jewell for determining if two accounts containing the same dialed telephone number qualify for Group 5—cannot determine whether those two people are married to each other, related to each other, live in the same household, or have some other relationship. Making such a determination requires an individual inquiry. Ms. Boulanger was able to identify relationships in the data by examining address fields, account manager information, and account notes, but in other cases there will not necessarily be account notes or other information that happens to reveal the relationships between subscribers on accounts with the same CBR. Determining whether two people are connected to each other in some way that explains why they provided the same CBR to Verizon may be identifiable only via deposition testimony or other individualized inquiry.
149. Based on the dialer data and the Remarks data upon which Mr. Jewell relied, Ms. Breda's phone number would not have been identified as qualifying for Group 5. Her telephone number appears in the dialer data sets only with respect to Ms. Kelton's account. It does not appear in the dialer data with respect to her Verizon Wireless accounts or any other accounts. According to the Fifth Declaration of Ms. Boulanger, the accounts held by Mr. and Mrs. Breda were never in collections. This is consistent with the fact that her number

does not appear in the data associated with any account other than that of Ms. Kelton. I understand that the only means by which it was determined that her telephone number was associated with a Verizon Wireless account other than that of Ms. Kelton was through individual inquiry because she brought this lawsuit.

## **X. MR. JEWELL'S METHODOLOGY FOR IDENTIFYING WHICH NUMBERS ARE ASSIGNED TO A CELLULAR TELEPHONE SERVICE IS NOT RELIABLE AND REQUIRES INDIVIDUAL INQUIRY**

150. In order to determine whether any given telephone number is assigned to a cellular telephone service at the time of the subject calls, Mr. Jewell utilizes data provided by “Interactive Marketing Solutions, Corp” (IMS) through their TCPA Litigation and Audit Database product.<sup>147</sup> Specifically, he uses the historical “Various Wireless Block Identifier” and “Wireless Ported Number” audit files.<sup>148</sup>
151. Aside from and before Mr. Jewell’s analysis of line type, there have been other analyses conducted to determine Ms. Breda’s line type. As of two separate reports from Neustar on October 7, 2016 and May 4, 2017, Ms. Breda’s (XXX) XXX-7857 telephone number was identified in the Neustar Numbering Portal as a “Wireline” telephone number, serviced by Bandwidth.com, at the time of the calls in suit in 2016.<sup>149</sup> At the time, Neustar was a third-party North American Numbering Plan Administrator (“NANPA”), which oversees the assignment of area codes, three-digit central office codes, carrier identification codes, and other numbering resources throughout the United States, Canada, Bermuda and 17 Caribbean countries<sup>150</sup> and a third-party administrator of the Number Portability

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<sup>147</sup> 5/3/2021 Jewell Report, ¶¶ 6(bb), 44-45; and “TCPA Litigation and Audit Services,” Interactive Marketing Solutions, at <https://www.ims-dm.com/mvc/page/tcpa-litigation-service/>.

<sup>148</sup> 5/3/2021 Jewell Report, ¶ 6(bb).

<sup>149</sup> 12/5/2016 Joint Report, p. 11 and Ex. 5; 5/8/2017 Friedman Declaration, ¶ 5-6 and Ex. 1; “TN History for [XXX-XXX]-7857,” Neustar, Inc., accessed May 4, 2017 at <https://numbering.neustar.biz/secure>, and Second Declaration of Meryl Friedman, *Breda v. Cellco Partnership et al.*, In the United States District Court for the District of Massachusetts, Case No.: 1:16-cv-11512-DJC, May 26, 2021 (hereafter, 5/26/2021 Friedman Declaration), Ex. A. See also, Cell Phone and Unlisted Number Search (CERBERUS DALEG [XXX.XXX].7857.pdf).

<sup>150</sup> Neustar continues to be the North American Numbering Plan Administrator (NANPA) in the United States. See “About NANPA,” Neustar, Inc., at [https://www.nationalnanpa.com/about\\_us/index.html](https://www.nationalnanpa.com/about_us/index.html); “NANPA: North American Numbering Plan Administration,” Neustar, Inc., at <https://www.nationalnanpa.com/>; and “Neustar

Administration Center (“NPAC”), which is the authoritative telecommunications industry database used for routing, rating, and billing calls for telephone numbers that have changed holders.<sup>151</sup>

152. Although Neustar was, at the time of the inquiry, the NANPA and NPAC, and its data on line types were therefore thought to be authoritative, it provided inaccurate information on the line type for Ms. Breda’s (XXX) XXX-7857 telephone number. That its data were inaccurate was learned only through individual inquiry. In fact, it required a legal ruling on appeal to determine Ms. Breda’s line type because it was, at the time of the calls in suit, a hybrid technology that uses both wireline and wireless connections.<sup>152</sup> The court concluded in making that ruling that even the data from Neustar was not authoritative.<sup>153</sup>
153. Specifically, the court did not dispute Bandwidth.com’s classification of Ms. Breda’s telephone number as “wireline” on Neustar, but concluded that “the pertinent question is not how Bandwidth, or any entity, ‘classifies’ Breda’s number [on Neustar or elsewhere], but whether her telephone number is in fact ‘being used in connection with’ a ‘cellular telephone service.’”<sup>154</sup> Because I understand that IMS historically obtained its data from

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Awarded North American Numbering Contract for a Third Term,” Neustar, Inc. Press Release, June 18, 2012, at [https://www.home.neustar/about-us/news-room/press-releases/2012/neustar\\_awarded\\_north\\_american\\_numbering\\_contract\\_for\\_a\\_third\\_term](https://www.home.neustar/about-us/news-room/press-releases/2012/neustar_awarded_north_american_numbering_contract_for_a_third_term).

<sup>151</sup> NPAC is the authoritative telecommunications industry database used for routing, rating and billing calls for telephone numbers that have changed holders. See, “The NPAC, Neustar & LNP,” NPAC, at <https://www.npac.com/number-portability/the-npac-neustar-lnp>. Neustar managed the NPAC for approximately two decades, starting 1997. In 2015, Telcordia Technologies, Inc. dba iconectiv was selected by the FCC to serve as the manager of the NPAC. The transition from Neustar to iconectiv was completed in May 2018. iconectiv is the current Local Number Portability Administrator and manager of the NPAC in the United States. See “NAPM Announces Completion of Transition to iconectiv as Nation’s New Local Number Portability Administrator.” NPAC News Release, May 29, 2018, at <https://iconectiv.com/news-events/napm-announces-completion-transition-iconectiv-nations-new-local-number-portability#:~:text=Washington%2C%20DC%20E2%80%93%20May%2029%2C,the%20nation's%20new%20Local%20Number>; Paula Bernier, “Future NPAC Administrator iconectiv Begins Testing,” Technology Marketing Corp, November 28, 2017, at <https://iconectiv.com/news-events/future-npac-administrator-iconectiv-begins-testing>; and “FCC Announces Successful Transition to New Administrator for Number Porting System,” Federal Communications Commission News Release, May 29, 2018, at <https://www.fcc.gov/document/fcc-welcomes-successful-transition-new-number-porting-administrator>.

<sup>152</sup> *Breda v. Cellco Partnership*, No. 17-2196 (1st Cir. 2019).

<sup>153</sup> *Breda v. Cellco Partnership*, No. 17-2196 (1st Cir. 2019), pp. 23-24.

<sup>154</sup> *Breda v. Cellco Partnership*, No. 17-2196 (1st Cir. 2019), p. 23.

Neustar and more recently from Telcordia / iconnectiv (the successor NPAC to Neustar),<sup>155</sup> neither IMS nor similar service providers would be able to answer the question of whether, at the time of a call at issue, Ms. Breda's or other telephone numbers were being used in connection with a cellular telephone service.

154. In addition to the two queries to Neustar conducted in 2016 and 2017 on Ms. Breda's number, both of which classified it as wireline, counsel for Verizon provided me with results of another query with another vendor, which I understand was conducted in November 2016.<sup>156</sup> That report also identified Ms. Breda's telephone number as wireline at the time of the calls in suit.
155. In addition, on May 22, 2021, Meryl Friedman, Senior Paralegal at Verizon, "pulled a report from Neustar of the history of [Ms. Breda's number]."<sup>157</sup> This query also identified Ms. Breda's line as wireline at the time of the calls in suit.<sup>158</sup>
156. At my request, Verizon asked Plaintiff to produce the IMS data upon which Mr. Jewell relied in conducting his analysis of which telephone numbers in this case were wireless at the time of the calls in suit. I understand that Mr. Jewell declined to provide his data in response to Verizon's discovery request.
157. The only report that has appeared in this case identifying Ms. Breda's number as wireless, rather than wireline, at the time of the calls in suit is the output provided by Mr. Jewell based on analysis conducted by Mr. Jewell using the IMS data that he declined to produce.
158. Because I was not able to validate Mr. Jewell's analysis against his IMS data, I sent the full list of 288,996 phone number/date combinations (for Group 1 Qualifying Calls) that Mr. Jewell analyzed for line type to IMS and requested that IMS run them against its Wireless Block Identifier and Wireless Ported Number audit files using the IMS TCPA

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<sup>155</sup> Kasra Kangarloo, "NeuStar loses bid for lucrative contract after FCC recommendation," Washington Business Journal, March 26, 2015, at <https://www.bizjournals.com/washington/blog/techflash/2015/03/neustar-loses-bid-for-lucrative-contract-after-fcc.html>; and Expert Report of Jan Kostyun dated March 4, 2019, *Marc Schaevitz, et al. v. Braman Hyundai, Inc.*, United States District Court, Southern District of Florida, Case No. 1:14-CV-23890, March 4, 2019, ¶ 85.

<sup>156</sup> See Cell Phone and Unlisted Number Search (CERBERUS DALEG [XXX.XXX].7857.pdf).

<sup>157</sup> 5/26/2021 Friedman Declaration, ¶ 4.

<sup>158</sup> 5/26/2021 Friedman Declaration, Ex. A.

Litigation and Audit Database service. The results differed from the results Mr. Jewell provided as support for his expert report for 360 telephone number/date combinations, including every one of the telephone number/dates for Ms. Breda's telephone number. Specifically, Ms. Breda's telephone number was reported by IMS in response to my inquiry as wireline, just as every other report discussed above found.

159. That IMS would produce a line-type result for Ms. Breda's (XXX) XXX-7857 telephone number at the time of the 2016 calls at issue in response to my request that is different from the result that Mr. Jewell claimed he obtained when he performed his analysis with the IMS data is unexplained.
160. Whatever the explanation for why Mr. Jewell reported that the IMS data showed Ms. Breda's line to be wireless when all other reports, including the report I requested directly from IMS, showed it to be wireline, the evidence from the history of analysis of Ms. Breda's phone number illustrates that the type of line associated with a particular telephone number at a point in time in the past is not necessarily determinable without an individual inquiry. Certainly, without individual inquiry, all of the databases consulted in this case would have found Ms. Breda's phone number to be wireline had her number simply been one of the hundreds of thousands of numbers that were analyzed in this case, and she would have been excluded from the class, Mr. Jewell's unique result notwithstanding.

## **XI. MR. JEWELL'S REPORT FAILS TO ADDRESS IN ANY WAY HOW PLAINTIFF WOULD DETERMINE WHO OWNS THE PURPORTED WRONG NUMBERS OR REVOCATION OF CONSENT NUMBERS**

161. As I indicated in Section V, Mr. Jewell's assignment was to provide analyses to identify "certain sets of individuals meeting various criteria that may be relevant to Plaintiff's motion for class certification."<sup>159</sup> In fact, nothing in Mr. Jewell's report pertains to the identification of any individuals. Mr. Jewell's report addresses only the identification of phone numbers. How one would identify the persons to which those purported "wrong number" calls were made is left entirely unaddressed by Mr. Jewell. If a call was intended

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<sup>159</sup> 5/3/2021 Jewell Report, ¶ 3.

for a Verizon customer but was received by someone else, Verizon's dialer and RMS records will be of no assistance in determining who that person was who received the call and who, presumably, would be the class member. Mr. Jewell has offered no method for identifying the human beings who would constitute the class.

**A. Available Third-Party Data on Current and Historical Name and Address Associated with Telephone Numbers Cannot Reliably Identify Class Members Without Individualized Inquiry**

162. This case pertains to wireless telephone numbers in the United States. American consumers—at least those of a certain age—take for granted the existence of the “phone book,” which is the directory listing of wireline telephone numbers provided by the traditional landline telephone companies. In contrast to landline telephone numbers, however, there is no “official” or dispositive directory or database of wireless telephone subscribers.<sup>160</sup>
163. Because there is no readily available industry-wide source of current or historical wireless telephone numbers, names, and addresses that is endorsed or produced by the telephone companies themselves, third-party data vendors attempt to collect such information from a variety of sources for sale to telemarketers and for other uses. Such sources include public records, surveys, and utility bills. Data from these vendors are unreliable, however, both for identifying current subscribers of wireless telephone numbers, and for identifying historical subscribers.
164. In the course of my work on TCPA matters in recent years I have researched and reviewed reverse-lookup data from several data vendors, including every reverse-lookup data vendor that I have seen recommended by a class administrator or plaintiff’s expert.<sup>161</sup> I have not found a vendor that warrants the accuracy of its data, nor one that discloses its sources, nor one that documents the error rate or incompleteness rate of its data.

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<sup>160</sup> Report and Order, *In the Matter of Protecting the Privacy of Customers of Broadband and Other Telecommunications Services*, Before the Federal Communications Commission, WC Docket No. 16-106, FCC 16-148 (Released: November 2, 2016), <https://docs.fcc.gov/public/attachments/FCC-16-148A1.pdf>, ¶ 98. The FCC states, “Unlike landline voice carriers, neither mobile voice carriers nor broadband providers publish publicly-available directories of customer information.”

<sup>161</sup> These include, among others, LexisNexis, MicroBilt, TransUnion, Experian, and PacificEast.

165. The potential for reverse lookup data to contain a material proportion of errors and omissions is validated by evidence from data analysis. In one matter in which I testified, the expert witness for the plaintiff testified that she believes the data from a particular third-party reverse lookup data vendor that she would rely upon for reverse lookup services if she were class administrator was 20 to 30 percent inaccurate.<sup>162</sup>

166. In a recent matter in which I reviewed data from a third-party vendor, the vendor was able to provide any name and address information on fewer than 20 percent of the phone numbers that were provided to it. Of the phone numbers for which the vendor was able to provide name and address information, almost all were associated with more than one name. Hence, the data were unable to identify a unique individual associated with a given phone number.

167. I have also observed that third party reverse lookup data often shows multiple names with overlapping dates, some or all of which may have the same last name but different first names (e.g., James Doe, Robert Doe, Leslie Doe, and George Doe). In some of these cases the names may have different addresses in the same or different towns. It is not possible to know from the data whether these names all relate to members of one family or whether the data sources simply confuse people with the same last name. Making such a determination would require an individual inquiry. If some or all of these individuals are members of the same family, the data nevertheless do not provide a means of determining which one (if any) was the recipient of a phone call at issue in this case. This determination would also require individual inquiry.

168. In some instances where multiple names are reported for the same number, the names share a last name but not first name (e.g., Robert Smith and James Smith), first name but not a last name (e.g., Robert Smith and Robert Doe), or do not share any name and the names have nothing in common (e.g., Robert Smith and James Doe). In addition, sometimes the names are associated with the same address, and sometimes with completely different

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<sup>162</sup> Hearing on Motions (Vol. 1), Proceedings before the Honorable Wiley Y. Daniel, Judge, United States District Court for the District of Colorado, *Seth Warnick, et al., v. DISH Network, L.L.C.*, In the United States District Court for the District of Colorado, Civil Action No. 12-cv-01952-WYD, March 19, 2014, p. 125.

addresses. That is, address information is also often not unique. One cannot resolve these inconsistencies without either speculation or additional, individualized inquiry. Based on my review, the names are sometimes, but not always, associated with date ranges in which the name purportedly was seen with the number in the vendor's data sources (such as on a public record). Sometimes no date ranges are supplied. When date ranges are provided, they do not necessarily uniquely identify names with specific time periods. Rather, the date ranges can overlap, meaning that the same telephone number is associated with multiple names during the same time period. When no date ranges are supplied, multiple names are associated with a telephone number over an indefinite and undefined period of time. It would not be possible to determine from data which of the provided names (if any) possibly associated with the number during the relevant time period was the one actually associated with the telephone number at the time the alleged violative call was made.

169. In my experience, I have not seen reverse-lookup data from any vendor that does not suffer the types of deficiencies that I just described, including a lack of any information on a substantial fraction of phone numbers and multiple names associated with the remaining phone numbers. I have also found that the reverse-lookup data sets from different vendors are not consistent with each other, by which I mean that for the same phone number, two different vendors will commonly have different sets of names.
170. In my experience, I have not seen reverse-lookup data from any vendor that does not suffer the types of deficiencies that I just described, including a lack of any information on a substantial fraction of phone numbers and multiple names associated with the remaining phone numbers. I have also found that the reverse-lookup data sets from different vendors are not consistent with each other, by which I mean that for the same phone number, two different vendors will commonly have different sets of names.

**B. Filtering Purported Wrong Numbers by Matching Names Against Reverse Lookup Data Cannot Reliably Identify Wrong Numbers Without Individual Inquiry**

171. Even if the reverse-lookup data provided by third-party vendors were complete (which, as discussed above, is not true), and even if it reliably identified unique individuals for each

phone number (which again, as discussed above, is not true), Plaintiff has not indicated how she would apply such data in this case. Would Plaintiff seek to determine if the name identified for a given phone number that was purportedly a wrong number is the same person as the Verizon customer that was being sought on the phone number in the first instance? If the name that, according to the third-party reverse lookup data were the same as the name of the Verizon customer that was being sought on the purportedly wrong number, that would call into question the validity of the number being wrong in the first instance.

172. Hence, if Plaintiff did not intend to check whether the person identified in the third party data as the owner of the phone number at the time of the alleged violation calls (i.e., the purported class member) was in fact the Verizon customer being sought (such as, for example, if they have the same name), Plaintiff would be systematically ignoring potential evidence contradicting her proposed methodology for identifying wrong number phone numbers. If instead Plaintiff did intend to check whether the person identified in the third party data as the owner of the phone number at the time of the alleged violation calls was in fact the Verizon customer that had been sought on those calls, Plaintiff has not identified any methodology for doing so. In a case such as this one, any methodology that entails matching the names and addresses of the purported class members from a third party database against the names and addresses of the Verizon customer being sought to determine if they are the same (implying the number was not wrong) involves a significant amount of ambiguity and is necessarily unsuited to identifying wrong numbers. I am aware of no methodology for doing so that would not require individualized inquiry.
173. As I discussed in Section IV, when a Verizon customer provides a CBR Number (a telephone number different from the Verizon MTN assigned to the customer with the account itself), that CBR Number may not be the Verizon customer's own telephone number or may not be a telephone number in the customer's own name. For example, this would generally be the case if the Verizon customer does not have a second telephone in his or her own name. Instead, the customer might provide the phone number of a spouse, family member, or other trusted contact. Attempting to match the name of the intended

call recipient (the Verizon customer) to the name of the owner of the dialed number at the time of the call will, in such circumstances, necessarily produce a mismatch and erroneously imply that the number was “wrong.”

174. For example, suppose a Verizon customer “James Roberts” did not have a wireline phone or a second wireless phone, so he provided the T-Mobile wireless telephone number of his wife, “Sandra Silver,” as his CBR Number when he establishes his Verizon account. Suppose Mr. Roberts fails to pay his phone bills, Verizon is unable to reach Mr. Roberts on his assigned Verizon number, and therefore attempts to call Mr. Roberts on his CBR Number to discuss his delinquent account. Suppose that his wife Sandra Silver answers the phone (as he provided her number as his CBR Number) and she claims the number is a wrong number and she does not know Mr. Roberts. A third-party reverse lookup database, if it accurately identifies the dialed number (the number provided by Mr. Roberts as a CBR Number) as being owned by Sandra Silver, will indicate that the name associated with the dialed phone number does not match the name of the Verizon account holder that Verizon was attempting to reach. But that mismatch does not imply that the CBR Number was a wrong number. Making such a determination would require additional, individual inquiry.
175. If it were to become a legal question for TCPA liability (about which I have no opinion) as to whether Mr. Roberts had the permission of his wife Ms. Silver to provide her number as a CBR Number, such a determination would also require an individual inquiry. For example, did his wife know he was providing the number? Did she agree to allow him to provide the number?
176. In this litigation, because any call made to a Verizon MTN at the time of the call should have been removed from the set of possible TCPA violations, the potential violation calls will necessarily be to a phone number other than the customer’s Verizon MTN. Hence, most or all of the collections calls may be to telephone numbers that are not in the name of the Verizon customer, although almost all of the numbers called were verified by Verizon to be numbers provided by the Verizon customer as CBR Numbers. Observing mismatches

between the names in third party reverse lookup data and names in Verizon's customer database cannot, therefore, be indicative of or evidence of "wrong number" calls.

177. Other reasons that attempting to verify or determine if "wrong numbers" are in fact incorrect via matching names against third-party data bases is unreliable include various misspellings, use of nicknames, reversal of first and last names, and other ambiguities that appear in third-party databases, as well as simply errors (identifying the wrong person) and multiple names in the third party databases.
178. I am aware that Mr. Jewell conducted a matching exercise to construct his Group 5, as discussed earlier, and he found no instances in which, when his mechanized matching algorithm concluded that two names on different Verizon Wireless accounts were different, a "human eye" review (for a sample) concluded that the names actually did likely belong to the same person.<sup>163</sup> Mr. Jewell's exercise notwithstanding, matching across databases from different sources is not the same as matching names within the same data source. Matching across data sources, particularly when one of them is from a third party with unverified information from multiple potential sources, is rife with ambiguities. I have conducted many such analyses and have found the instances of significant ambiguities to be nearly ubiquitous.

#### **C. Filtering Purported Wrong Numbers by Matching Names Against Carrier Data Cannot Reliably Identify the Names of Class Members or Determine Wrong Numbers Without Individual Inquiry**

179. As noted, neither Mr. Jewell nor Plaintiff has offered any means of identifying the individuals who are the purported class members in this case. I am aware that in some cases, Plaintiffs propose to obtain the names of the users of wireless telephone numbers at the time of the alleged violation calls via subpoenas to the wireless carriers.
180. Plaintiff has not proposed to issue subpoenas to wireless carriers, but obtaining data from wireless carriers will not overcome the fundamental issue I discussed in the previous subsection. Like the data from third-party reverse-lookup data vendors, data from wireless

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<sup>163</sup> 5/3/2021 Jewell Report, ¶¶ 72-74.

carriers would also not provide a reliable means of distinguishing between true wrong numbers and false wrong numbers, for three reasons.

181. First, consider again the fact that the phone numbers at issue in this case are phone numbers that a customer, in almost every case, provided as a CBR Number rather than the customer's Verizon wireless number. Hence, the number may be that of the customer's family member or friend, rather than that of the subscriber himself or herself. The name provided by the carrier will, in such cases, not be that of the Verizon customer but will not necessarily be a wrong number or be someone other than the individual whose number was provided by the customer.
182. With reference to my earlier example, if James Roberts, a delinquent Verizon customer, provided the T-Mobile wireless phone number of his wife Sandra Silver as his CBR Number and Verizon called her number, Plaintiff would presumably attempt to subpoena the name associated with Ms. Silver's phone number from T-Mobile. Presuming T-Mobile complied and provided Ms. Silver's name, the fact that her name differed from Mr. Roberts's name would not be valid evidence that the number called was a wrong number. Determining whether Ms. Silver was truthful in saying she did not know Mr. Roberts, or was attempting to mislead the caller in order to avoid exposing her husband to a bill collector, would require an individual inquiry. And, as noted earlier, if it is necessary to determine whether Mr. Roberts had Ms. Silver's permission to provide her number as a CBR Number would require an individual inquiry.
183. There are two additional problems associated with wireless carrier data for use in this case.
184. First, wireless carriers do not necessarily know the name or address of the individual user of a particular telephone number on their accounts. For example, this is often the case for telephone users whose phones are subscribed under family plans or business accounts.
185. Family and other group plans are often (if not always) held in the name of one customer (the party to whom the bill is addressed).<sup>164</sup> While carriers generally have names associated

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<sup>164</sup> For this and the following paragraph, *see, for example*, Declaration of Neil Schmidt, *Morgan v. Orlando Health, Inc. et al.*, In the United States District Court for the Middle District of Florida, Case No.: 6:17-cv-01972-CEM-

with the customers on all post-paid accounts, they do not necessarily have names for all the users of the lines within multi-line post-paid accounts. For example, the customer on a family plan consisting of five people may be the mother, and the carrier would therefore have the mother's name as the customer on the account, but the carrier may not have a record of names associated with the other four lines in the account. In such a case, a query of the carrier's customer database for each line in the account will return the name of the mother, not the name of the holder of each individual line.

186. When carriers do have the names of users, carriers typically do not verify or validate the information. The names may be nicknames or generic names (such as "daughter"). They are also not necessarily updated if and when the users of lines in a multi-line plan change. For example, when an older child leaves home and obtains his own account, the parents may reassign the number to a younger child but, unless the parent remembers and chooses to update the information held by the carrier, the carrier will (if it has any name for the user of the line) still have the name of the older child.
187. For these reasons, the name provided by the carrier will not necessarily be the user of the line or the person who was called on the alleged violation calls.
188. In addition, for these reasons, even if the user on the dialed number were the same as the Verizon customer, the carrier data would not necessarily show it. Consider a slightly modified version of the hypothetical example of James Roberts. Suppose the CBR Number he provided was his own number that was part of a multi-line AT&T account on which his wife Sandra Silver was the subscriber. A query to AT&T would produce her name as the

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GJK, May 24, 2019 (hereafter, *5/24/2019 Schmidt Declaration*), ¶¶6, 7, 10; Declaration of Lisa Likely, *Angela Morgan v. Orlando Health, Inc., et al.*, In the United States District Court Middle District of Florida, Orlando Division, Case 6:17-cv-01972-CEM-GJK, May 23, 2019 (hereafter, *05/23/19 Likely Declaration*), ¶¶ 5-6, 9, 12; Declaration of Patricia Cauldwell, *Brian Keim v. ADF Midatlantic LLC, et al.*, In the United States District Court for the Southern District of Florida, Civil Action No. 9:12-cv-80577-KAM, May 17, 2019 (hereafter, *05/17/19 Cauldwell Declaration*), ¶¶ 4, 8; Affidavit of Calli Keep, *Angela Morgan v. Orlando Health, Inc., et al.*, In the United States District Court Middle District of Florida, Orlando Division, Case 6:17-cv-01972-CEM-GJK, May 3, 2019 (hereafter, *05/03/19 Keep Affidavit*), ¶ 8; and Declaration of George Kamba, *Angela Morgan v. Orlando Health, Inc., et al.*, In the United States District Court Middle District of Florida, Orlando Division, Case 6:17-cv-01972-CEM-GJK, May 29, 2019 (hereafter, *05/29/19 Kamba Declaration*), ¶¶ 5, 6.

subscriber of that line unless Sandra had provided James's name to AT&T as the user of that line.

189. Family and other group plans are and were very common during the time of calls to Ms. Breda in 2016. For example, in 2016, a Cowen & Company survey found that 65.5 percent of wireless telephone subscribers were on multiple line family plans.<sup>165</sup> According to Verizon, the average retail post-paid Verizon account had 2.98 telephone numbers in 2015.<sup>166</sup> Other group plans include business plans, in which a company provides wireless service and phones to its employees under a company-subscribed plan.
190. A second impediment to using data from wireless carriers to identify the users of wireless telephone numbers is that carriers do not necessarily have names associated with all of their customers. In particular, carriers do not necessarily know who the customers are to their prepaid accounts—indeed, one of the attractions of prepaid accounts for some customers is that they can be obtained anonymously or under false names, because carriers need not perform a credit check or other checks on accounts that are prepaid. To the extent carriers have names on prepaid accounts, they are generally not verified.
191. For example, I understand that AT&T does not require prepaid customers to provide personal information upon account activation, and no steps would be taken to verify the completeness or accuracy of such information if it is provided.<sup>167</sup> Likewise, upon account activation, U.S. Cellular does not require prepaid customers to provide personal information and no steps are taken to verify the completeness or accuracy of such information.<sup>168</sup> T-Mobile also stated that it does not require customers of prepaid accounts to provide personal identifying information upon account activation because T-Mobile does not send bills to these customers.<sup>169</sup>

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<sup>165</sup> Colby Synesael, *et al.*, "Wireless Survey – 4Q16 + CowenVision Video," Cowen and Company Equity Research, January 18, 2017, p. 11.

<sup>166</sup> 5/24/2019 Schmidt Declaration, ¶5. See also, 05/23/19 Likely Declaration, ¶ 7.

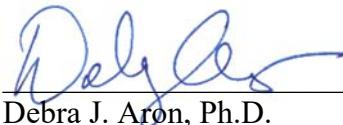
<sup>167</sup> 05/23/19 Likely Declaration, ¶ 3.

<sup>168</sup> 05/29/19 Kamba Declaration, ¶ 3.

<sup>169</sup> 05/17/19 Cauldwell Declaration.

192. Prepaid accounts were a very significant part of the wireless marketplace during the time of calls to Ms. Breda in 2016. The FCC found that as of the fourth quarter of 2016, prepaid connections accounted for about 23 percent of all retail mobile wireless connections, whereas postpaid connections accounted for about 77 percent.<sup>170</sup>

193. Prepaid subscribers are also more likely than postpaid subscribers to be in lower income brackets.<sup>171</sup> Because the calls at issue in this case relate to debt collections, a disproportionate number of the intended call recipients may be more likely (from a statistical, demographic standpoint) to have prepaid, rather than postpaid, wireless accounts.



Debra J. Aron, Ph.D.  
May 26, 2021

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<sup>170</sup> Twentieth Report, *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Before the Federal Communications Commission, WT Docket No. 17-69, FCC 17-126 (Released: September 27, 2017), <https://www.fcc.gov/document/fcc-releases-20th-wireless-competition-report-0> (hereafter, *2017 FCC 20<sup>th</sup> CMRS Report*), Appendix II: Table II.B.ii, p. 73 and Chart II.B.2 at p. 12. Table II.B.ii shows quarterly total mobile wireless connections by service segment: it reports 257,158,000 postpaid (retail) connections and 77,216,000 prepaid (retail) connections, for a total of 334,374,000 retail connections in the fourth quarter of 2016. Postpaid connections then have a share of 257,158,000 /334,374,000 = 77 percent of retail connections and prepaid connections have a share of 77,216,000 /334,374,000 = 23 percent. The non-retail connections comprise wholesale connections (25,031,000 connections, or 6 percent of the total 416,684,000 wireless connections in the fourth quarter of 2016) and “connected devices” such as data sticks and WiFi hot-spots (57,279,000 connections, or 14 percent of wireless connections in the fourth quarter of 2016). Wireless connections are not exactly equal to subscribers, as a subscriber might have more than one wireless connection associated with an account. See *2017 FCC 20<sup>th</sup> CMRS Report*, ¶ 19 and footnote 64.

<sup>171</sup> As of May 2016, 26.8 percent of prepaid subscribers in the U.S. had an annual income below \$25,000, compared to 11.7 percent of postpaid subscribers, and over 50 percent had an annual income below \$50,000, compared to just over 30 percent for postpaid subscribers. Nineteenth Report, *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Before the Federal Communications Commission, WT Docket No. 16-137, DA 16-1061, <https://www.fcc.gov/document/19th-mobile-wireless-competition-report> (Released: September 23, 2016) (hereafter, *2016 FCC 19<sup>th</sup> CMRS Report*), ¶ 46 and Chart III.B.1 at p. 38.

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Dr. Debra J. Aron is a Vice President in the Competition Practice. Debra applies her expertise in economic and policy matters, including competition and antitrust analysis, intellectual property, class certification, and damages analysis, in both regulatory and litigation disputes. She has provided expert testimony for over 20 years in a variety of high-stakes federal, state, regulatory, and arbitration cases relating to competition and antitrust including market definition, conduct cases, and price fixing damages, intellectual property damages including patents and trade secrets; class actions and class certification including consumer fraud matters and TCPA; pricing; unjust enrichment; and economic cost analyses. She also has conducted competition analyses in several high-profile mergers and macroeconomic analyses of pricing and investment changes. Dr. Aron's practice spans many industries, and she has a specific expertise in telecommunications and technology, including wireless services, wireline services, backbone, RAN, and customer premises equipment, satellite communications, and computer technology.

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"Ability, Moral Hazard, and Firm Diversification," Various Universities, 1985, 1994, including Yale University, University of Rochester, Stanford University, University of Minnesota, California Institute of Technology, Duke University, Northwestern University, Brown University, Harvard University, University of California - Los Angeles, University of Pennsylvania.

## Academic Journal Refereeing

Dr. Aron has served as a referee for The Rand Journal of Economics, the Journal of Political Economy, the Journal of Finance, the American Economic Review, the Quarterly Journal of Economics, the Journal of Industrial Economics, the Journal of Economics and Business, the Journal of Economic Theory, the Journal of Labor Economics, the Review of Industrial Organization, the European Economic Review, the Journal of Economics and Management Strategy, the International Review of Economics and Business, the Quarterly Review of Economics and Business, Management Science, the Journal of Public Economics, the Journal of Institutional and Theoretical Economics, and the National Science Foundation.

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Deposition of Debra J. Aron in Re Optical Disk Drive Antitrust Litigation, Hewlett-Packard Company v. Toshiba Corp., et al., United States District Court, Northern District of California, MDL Docket No. 3:10-MD-02143-RS, Case No. 3:13-cv-05370-RS, March 23, 2017.

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Deposition of Debra J. Aron in Herbert Chen et al. v. Robert Howard-Anderson et al., In the Court of Chancery of the State of Delaware, Case No. C.A. 5878-VCL, December 16, 2014.

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Prefiled Written Testimony and Rebuttal Testimony of Debra J. Aron in the Matter of: An Investigation Into the Intrastate Switched Access Rates of All Kentucky Incumbent and Competitive Local Exchange Carriers, Commonwealth of Kentucky, Before the Public Service Commission, Docket No. 2010-00398, September 30, 2011, and July 8, 2011.

Testimony of Debra J. Aron before the Utilities Committee of the Kansas Legislature regarding the status of competition in telecommunications markets in Kansas, February 2011.

Testimony of Debra J. Aron before the Telecommunications Committee of the Legislature of the state of Washington regarding the consumer benefits and competitive effects of switched access reform, February 2011.

## Professional organizations

Member, American Economic Association

Member, Econometric Society

Associate Member, American Bar Association

Past Member, Telecommunications Policy Research Conference Program Committee

## Honors and awards

Guthman Research Chair, Kellogg Graduate School of Management, Northwestern University, Summer 1994.

Hoover National Fellowship, Hoover Institution, 1992-1993.

Faculty Research Fellow, National Bureau of Economic Research, 1987-1990.

PepsiCo Research Chair, Northwestern University, 1990.

Kellogg Research Professorship, Northwestern University, 1989.

National Science Foundation Research Grant, 1987-1988.

Buchanan Chair, Kellogg Graduate School of Management, Northwestern University, 1987-1988.

IBM Chair, Kellogg Graduate School of Management, Northwestern University, 1986-1987.

## Teaching

Courses taught: Pricing Strategy; Information, Communication, and Competition (economics of strategy and competition); Intermediate Microeconomic Theory; Managerial Economics (microeconomic theory as applied to business strategy and decision making) at the M.B.A. level, The Economics of Information at the Ph.D. level.

Also qualified to teach: graduate Microeconomic Theory; Industrial Organization and Labor Economics; the Economics of Personnel; Public Finance; Project Evaluation; Applied Game Theory.

## Professional history

2019–Present	<i>Vice President</i> , Charles River Associates, Chicago, IL
2018–2019	<i>Principal and Senior Managing Director</i> , Ankura Consulting Group, Chicago, IL
2010–2018	<i>Principal and Managing Director</i> , Navigant Economics, Chicago, IL
2000–2016	<i>Adjunct Associate Professor</i> , Northwestern University, Evanston, IL
1995–2010	<i>Managing Director</i> , LECG, LLC, Evanston, IL
1993–1995	<i>Visiting Assistant Professor of Managerial Economics</i> , Northwestern University, Evanston, IL
1985–1992	<i>Assistant Professor of Managerial Economics</i> , Northwestern University, Evanston, IL
1992–1993	<i>National Fellow</i> , Hoover Institution at Stanford University, Stanford, CA
1983–1984	<i>Instructor</i> , University of Chicago Department of Economics, Chicago, IL
1979–1980	<i>Staff Economist</i> , Civil Aeronautics Board, Office of Economic Analysis, Washington, D.C.

May 2021

### List of Documents Considered

**Procedural Documents and Exhibits Therein, *Robin Breda, et al. v. Cellco Partnership d/b/a Verizon Wireless, In the United States District Court for the District of Massachusetts, Case 1:16-cv-11512-DJC***

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Declaration of Ibraheem Khalifa, March 30, 2017.

Declaration of Lisa Jill Freeman, April 4, 2017.

Declaration of Cheryl Boulanger, April 4, 2017.

Declaration of Meryl Friedman, May 8, 2017.

Defendant's Statement of Undisputed Material Facts in Support of Its Motion for Summary Judgment, May 8, 2017.

Plaintiff's Response to Defendant Verizon Wireless Statement of Facts, May 30, 2017.

Second Declaration of Cheryl Boulanger, June 8, 2017.

Third Declaration of Cheryl Boulanger, June 9, 2017.

Declaration of Karl King, September 13, 2017.

Declaration of Laurence Siegel, September 13, 2017.

Memorandum and Order, November 17, 2017.

Unopposed Motion to Amend Doc. No. 139, February 4, 2020.

Plaintiff's Motion for a Rule to Show Cause, March 10, 2020.

Memorandum of Law in Opposition to Defendant's Motion for Proposed Case Management Schedule, March 24, 2020.

Plaintiff's Response to Court Order and Revised Proposed Case Management Schedule, March 24, 2020.

Fourth Declaration of Cheryl Boulanger, March 27, 2020.

Stipulation Regarding Plaintiff's Discovery Requests, May 29, 2020.

Defendant's Response to Court Order and Revised Proposed Case Management Schedule, June 17, 2020.

Defendant's Assented-to Motion for Extension of Time, July 21, 2020.

Defendant's Motion for Entry of Proposed Case Management Schedule, September 15, 2020.

Defendant's Motion for Leave to File Reply, October 1, 2020.

Unopposed Motion to Revise/Reconsider Case Management Schedule, October 9, 2020.

Defendant's Assented-to Motion to Extend Scheduling Order Deadlines, November 2, 2020.

Declaration of Emily H. Bryan, Esq. in Support of Motion to Dismiss, November 13, 2020.

Defendant's Motion to Dismiss, November 13, 2020.

Memorandum of Law in Support of Defendant's Motion to Dismiss, November 13, 2020.

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Declaration of Lorne George, Sr., May 21, 2021.

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Second Declaration of Meryl Friedman, May 26, 2021.

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*Breda v. Cellco Partnership*, No. 17-2196 (1st Cir. 2019).

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“Nate Shapley,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/nateshapley/>.

“Ron Martinez,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/ronrmartinez/>.

“Amit Tyagi,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/amitt1/>.

“Heather Grafton,” LinkedIn Corporation, accessed May 14, 2021 at <https://www.linkedin.com/in/heather-grafton-14198a64/>.

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Kasra Kangarloo, “NeuStar loses bid for lucrative contract after FCC recommendation,” Washington Business Journal, March 26, 2015, at <https://www.bizjournals.com/washington/blog/techflash/2015/03/neustar-loses-bid-for-lucrative-contract-after-fcc.html>.

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Colby Synesael, *et al.*, “Wireless Survey – 4Q16 + CowenVision Video,” Cowen and Company Equity Research, January 18, 2017.

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Nineteenth Report, *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Before the Federal Communications Commission, WT Docket No. 16-137, DA 16-1061 (Released: September 23, 2016).

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Email, Alison T. Holdway to Timothy Sostrin, RE: Verizon/Breda, April 9, 2021.

## Data

Cell Phone and Unlisted Number Search (CERBERUS DALEG [XXX.XXX].7857.pdf)  
 25345751\_v 2\_Breda Dialer Records (4).XLS  
 breda\_analysis\_DRAFT.r  
 breda\_numbers\_for\_report\_DRAFT.Rmd  
 breda\_plaintiff\_analysis\_DRAFT.r  
 day\_matched\_remarks\_annotated.rds  
 exclude\_codes.csv  
 ims\_flag\_plaintiff\_numbers\_dates\_2016.RdS  
 multi\_account\_sample\_20210502.xlsx  
 remarks\_sample\_annotated.xlsx  
 scrubbed\_multi\_numbers\_dates\_all.RdS  
 scrubbed\_qualifying\_numbers\_dates\_all.RdS  
 scrubbed\_subsequent\_numbers\_dates\_all.RdS  
 cust\_mtn.csv  
 20210524ScrubbedCallFile.txt

## Bates Numbered Documents

Bates Alpha	Beginning Bates	Ending Bates
VZW	0001	0052
VZW	0053	0105
VZW	0106	
VZW	0107	
VZW	0108	0120
VZW	0121	
VZW	0122	
VZW	0123	0155
VZW	0207	0215
VZW	0216	
VZW	0217	
VZW	0218	

VZW	0219
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